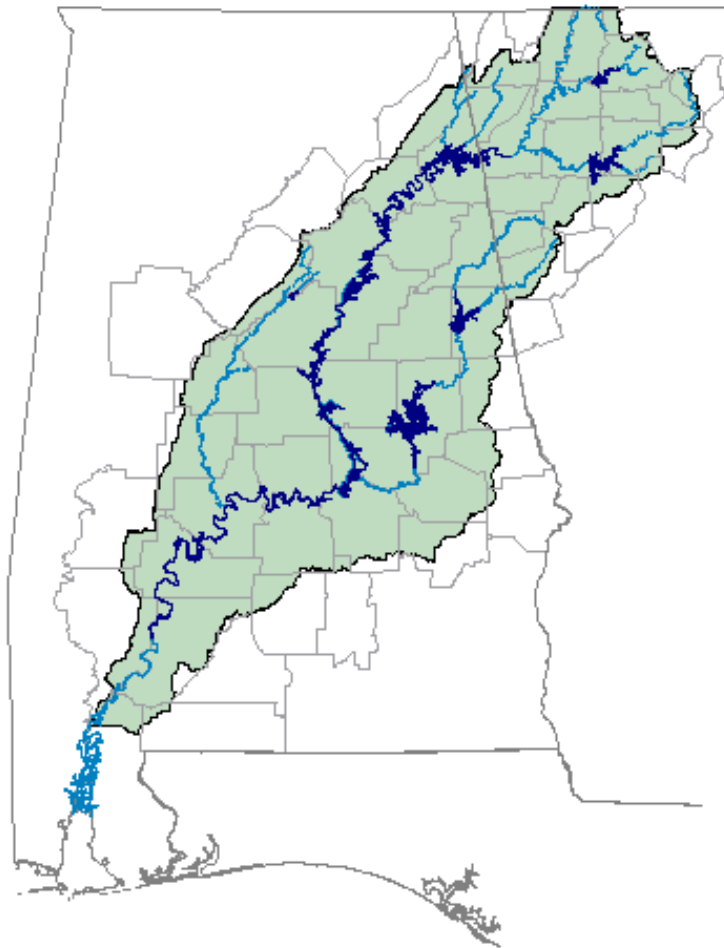


State of Alabama  
State of Georgia

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# ACT Water Allocation Formula



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Alabama – Coosa – Tallapoosa River Basin

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# Preamble

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## ACT Water Allocation Formula

### Preamble



**Whereas**, the States of Alabama and Georgia and the United States of America entered into the Alabama-Coosa-Tallapoosa River Basin Compact for the purposes of promoting interstate comity, removing causes of present and future controversies, equitably apportioning the surface waters of the Alabama-Coosa-Tallapoosa River Basins, engaging in water resources planning, and developing and sharing common databases;

**Whereas**, Article VII of the Alabama-Coosa-Tallapoosa River Basin Compact authorized the States of Alabama and Georgia to establish an allocation formula for equitably apportioning the surface waters of the ACT Basin among the states; and

**Whereas**, the States of Alabama and Georgia recognize the need for cooperation in developing an allocation formula that resolves existing and potential disputes over water needs and flows in the ACT Basin, especially during dry periods, and that provides for sharing of the waters of the ACT Basin among the States of Alabama and Georgia.

**NOW, THEREFORE**, in consideration of the foregoing, the States of Alabama and Georgia hereby establish an allocation formula for the Alabama-Coosa-Tallapoosa River Basin as authorized by the Compact.

Section

1

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ACT Water Allocation Formula

## Section 1 - Implementing Agreement

### Authority

The methodology and procedures for this Allocation Formula are authorized pursuant to the terms of Articles VI(g)(12) and VII of the Alabama-Coosa-Tallapoosa River Basin Compact as adopted by: Alabama Acts 97-66, Alabama Code, Title 33-18-1 et seq., and signed by the Governor of Alabama on February 25, 1997; Georgia Acts No. 6, Ga. Code Ann. Section 12-10-110 et seq., and signed by the Governor of Georgia on February 25, 1997; and passed by the United States Congress on November 7, 1997 and signed by the President of the United States on November 20, 1997 as Public Law No. 105-105, 111 Stat. 2223.

### Intent of the Parties

The parties acknowledge that this Allocation Formula consists of complex and extensive methodologies and procedures and hereby agree that the Allocation Formula consists of the following components:

Preamble

Section 1 - Implementing Agreement

Section 2 - Definitions

Section 3 - Conversion Factors

Section 4 - ACT Committee

Section 5 - Flood

Section 6 - Drought

Section 7 - Water Schedule

Section 8 - Water Quality

Section 9 - Water Supply Contracts

Section 10 - Compensation

Section 11 - Monitoring and Reporting



Section 12 - Implementation Schedule

Section 13 - Enforcement

Section 14 - Approval

## Duration of Agreement

This Agreement shall become effective upon adoption and signature by the State Commissioners and the concurrence (or a failure to non-concur) by the Federal Commissioner. This Agreement shall remain in effect unless or until:

- It is amended in accordance with the terms of the Compact;
- It is rescinded by unanimous decision of the voting members of the ACT Commission; or
- The ACT Commission is abolished for any reason.

Section  
**2**

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ACT Water Allocation Formula

## Section 2 - Definitions

### Definitions

For the purposes of the ACT Water Allocation Formula the following words, phrases and terms shall have the following meanings.

**"7Q10"** is the lowest mean flow during seven (7) consecutive days of a year that will be expected to occur once every 10 years.

**"Acre-foot (acre-ft)"** is the volume of water required to cover 1 acre of land (43,560 square feet) to a depth of 1 foot, equivalent to 325,851 gallons.

**"ACT Committee"** means the Alabama-Coosa-Tallapoosa Committee created and established pursuant to the ACT Water Allocation Formula contained in this agreement.

**"ACT Basin"** or **"ACT"** means the area of natural drainage into the Alabama River and its tributaries, the Coosa River and its tributaries, and the Tallapoosa River and its tributaries. Any reference to the rivers within this agreement will be designated using the letters "ACT" and when so referenced will mean each of these three rivers and each of the tributaries to each such river.

**"ACT River Basin Compact"** or **"ACT Compact"** means the Alabama-Coosa-Tallapoosa River Basin Compact as adopted by: Alabama Acts 97-66, Alabama Code, Title 33-18-1 et seq., and signed by the Governor of Alabama on February 25, 1997; Georgia Acts No. 6, Ga. Code Ann. Section 12-10-110 et seq., and signed by the Governor of Georgia on February 25, 1997; and passed by the United States Congress on November 7, 1997 and signed by the President of the United States on November 20, 1997 as Public Law No. 105-105, 111 Stat. 2223.

**"Advanced tertiary treatment"** is a method of wastewater treatment that is more advanced than secondary treatment and where effluent levels are treated to a minimum BOD<sub>5</sub> of 10 mg/l and ammonia of 2 mg/l or less.

**"Alabama River Basin"** means the area of natural drainage into the Alabama River and its tributaries.

**"Allocation formula"** means this agreement and all components thereof.

**"Basin"** means the area of natural drainage with a central or primary stream which collects surface water runoff.

**"Commission"** or **"ACT Basin Commission"** means the Alabama-Coosa-Tallapoosa River Basin Commission created and established pursuant to Alabama Code, Title 33-18-1 et seq.; Georgia Code Ann. Section 12-10-110 et seq.; and Public Law No. 105-105, 111 Stat. 2223.

**"cfs"** or **"cubic foot per second"** is a flow of volume equal to one cubic foot of water passing through a vertical plane in one second.

**"Conservation storage"** or **"Operating pool"** is the water storage within a reservoir used to augment low flows or to meet flow requirements for specific purposes.

**"Consumption"** is that portion water withdrawn for use that is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock or otherwise removed from the immediate water environment, including interbasin transfer and not returned to the drainage basin from which it was withdrawn as treated wastewater pursuant to a National Pollutant Discharge Elimination System (NPDES) permit.

**"Coosa River Basin"** means the area of natural drainage into the Coosa River and its tributaries.

**"Critical yield"** is the continuous streamflow possible during the critical period. This includes maximum use of conservation storage combined with natural streamflow.

**"Daily flow"** is the total water that flows past a gaging point in one 24-hour period expressed as a measurement in appropriate units

**"Daily timestep"** is the division of hydrologic information into a 24-hour period.

**"Dam"** is defined as any artificial barrier, including appurtenant works, which is twenty five (25) feet or more in height from the natural bed of the stream or water course measured at the downstream toe or the lowest elevation of the outside limit of the barrier (whichever is lower) to the maximum water storage elevation or has an impounding capacity at maximum water storage elevation of fifty (50) acre-feet or more.

**"Drainage basin"** is the area around a surface water drainage system that that would naturally contribute run-off from precipitation to the system.

**"Flood control storage"** or **"flood storage"** is the water storage within a reservoir used to reduce high flows or the storage between the flood guide curve and the top of the spillways.

**"Flood guide curve"** or **"flood control guideline elevation"** is the seasonally adjusted elevation developed by reservoir operators at each project which establishes the highest reservoir level for normal operations. Once the elevation exceeds the flood guide curve, flood control procedures are in effect.

**"Gage"** or **"Gaging station"** or **"Monitoring station"** is a site on a stream, canal, lake, or reservoir used to systematically observe the discharge, flow, and chemical quality or gage height of water, and has a gage recorder, or similar equipment.

**"Ground waters"** means waters within a saturated zone or stratum beneath the surface of land, whether or not flowing through known and definite channels.

**"Hydrologic Unit Code"** or **"HUC"** is the numerical designation of those areas of natural surface water drainage based on delineation to the eight digit level by the USGS and as further defined to the 11 digit level by the NRCS (formerly the SCS)

and as depicted on 1:500,000 scale maps: Alabama - SCS Map #1003197, Revised July, 1994 and Georgia – SCS Map #1005890, Revised May, 1990).

**“Inactive storage”** is the water storage within a reservoir, which is unavailable for normal uses, and is only evacuated in an emergency.

**“Incremental local flow”** is the water flow entering a surface stream from the local area between two specified points or locations on that stream.

**“In-stream use”** is water use taking place within the stream channel, including but not limited to hydroelectric power generation, navigation, fish propagation, and recreational activities.

**“Interbasin transfer”** means a withdrawal or diversion of water where the returned water is discharged to a river basin other than the basin from which it is withdrawn or diverted.

**“Lake”** is a body of water, natural or constructed, in which water is collected and stored for any use, and has an impounding capacity at maximum water storage elevation of fifty (50) acre-feet or more.

**“Mean annual inflow”** is the cumulative average of the naturally occurring water that flows into a water body over the course of each hydrologic water year since October 1, 1938 (1939 water year).

**“Minimum flow requirements”** are requirements for which reservoirs may be operated to ensure that water flows at specific locations within the reservoir system always exceed targeted levels and is also the required flow at a specified location on a river or tributary.

**“Monthly timestep”** is the division of hydrologic information into a 720-hour period.

**“Municipal and Industrial”** or **“M&I”** means water that is used, both publicly supplied and self-supplied, including residential, commercial, governmental/institutional, industrial/manufacturing, and other uses including unaccounted water use.

**“Natural flow”** is the water flow that would be present in a stream, at a specific location, if unaltered by man.

**“Navigable waters”** are rivers or other bodies of water used or susceptible of being used in their ordinary condition, as highways of commerce over which trade and travel are or can be conducted by customary modes of trade or travel on water.

**“Normal storage”** is the total storage space in a reservoir below the normal retention level, including dead and inactive storage, and excluding any flood control or surcharge storage.

**“Off-stream reservoir”** is an impoundment of water of 100 acre-feet or more that does not overflow a natural watercourse.

**“Off stream use”** is water withdrawn or diverted from a ground or surface water source for public water supply, industry, irrigation, livestock, thermoelectric power generation, or other uses.

**“Palmer Drought Severity Index”** or **“Palmer Index (PI)”** compares soil moisture supply and demand to indicate the severity of a wet or dry spell. The PI is based on long-term precipitation and temperature records and treats drought severity as a function of accumulated weighted differences between actual and required

precipitation. The PI calculations are available for all climate divisions through the U.S. National Weather Service in the *Weekly Weather and Crop Bulletin*.

**"Person"** means any individual, firm, association, organization, partnership, business, trust, corporation, public corporation, company, the United States of America, any state, and all political subdivisions, regions, districts, municipalities, and public agencies thereof.

**"Rating curve"** is a graph showing the relation between gage height and the quantity of water (volume per unit of time) flowing in a stream channel.

**"Reach"** is a continuous part of a stream between two specified points.

**"Reallocation"** is the modification of the use of storage from principal or specific project purposes, as identified in Federal statutes, to municipal and industrial water supply use from a Federal reservoir.

**"Reservoir"** is a body of water, natural or constructed, in which water is collected and stored for any use, and has an impounding capacity at maximum water storage elevation of fifty (50) acre-feet or more.

**"Return flow"** is the amount of water that reaches a surface water source after release from the point of use and thus becomes available for further use.

**"River"** is a large natural stream of water emptying into an ocean, a lake, or another body of water and usually fed along its course by converging tributaries.

**"River reach"** refers to the length of a river between two locations.

**"Rule curve"** is the reservoir target pool levels, which may vary seasonally; multiple rule curves may be imposed upon both flood control and conservation storage prescribing reservoir releases according to time of year and current pool elevation.

**"Runoff"** is the portion of precipitation, snowmelt, or irrigation that flows over and through the soil, eventually making its way to surface water supplies. It is equivalent to streamflow unaffected by artificial diversions, storage, or other human works in or on the stream channels.

**"Run-of-river project"** is a project where the reservoir does not fluctuate on a seasonal basis, or that does not seasonally redistribute flows.

**"Stage"** is the elevation of a water surface above or below an established datum; gage height.

**"Storage"** is the area impounded by a reservoir, which is used to impound water and release it at different rates and times as needed to satisfy both reservoir and downstream water demands.

**"Stream"** is a flow of running water that runs along a channel and has a surface open to the atmosphere.

**"Stream discharge"** is the volume of water flowing past a given point in a stream channel in a given period of time.

**"Stream reach"** is equivalent to "river reach" defined above.

**"Surface waters"** means waters upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused. Water from natural springs shall be considered "surface waters" when it exits from the spring onto the surface of the earth.

**"Tallapoosa River Basin"** means the area of natural drainage into the Tallapoosa River and its tributaries.

**"Tributary"** is a stream that flows into a larger stream or other body of water.

**"Unimpaired flow"** is the historically observed flow at a point adjusted to account for the construction of large surface water reservoirs, withdrawals and returns for municipal and industrial water uses and withdrawals for crop irrigation.

**"United States"** or **"U.S."** means the executive branch of the government of the United States of America, and any department, agency, bureau or division thereof.

**"Unregulated flow"** is flow that would be present in a stream, at a specific location, if no reservoirs existed and/or to flows once the effects of reservoirs have been removed by some computational method.

**"Water demand"** is the objectives fully or partially met by use of water resources; examples are hydropower (firm energy and dependable capacity), water supply, recreation, minimum flows, navigation depths, and water quality.

**"Water export"** is the artificial transfer of water out of one region to another.

**"Water resource facility"** means any facility or project constructed for the impoundment, diversion, retention, control or regulation of waters within the ACT Basin for any purpose.

**"Water resources"** or **"waters"** means all surface waters and ground waters contained or otherwise originating within the ACT Basin.

**"Water use"** as withdrawals of water; consumptive use of water, return flow and both off-stream and in-stream uses.

**"Water year"** is a continuous 12-month period from October 1 through September 30 identified by the calendar year in which it ends, selected to present data relative to hydrologic or meteorologic phenomena during which a complete annual hydrologic cycle normally occurs.

**"Watershed"** is the land area that contributes runoff to a given point in a stream or river. Synonymous with catchment and drainage or river basin.

**"Web site"** is the electronic location of information on the Internet.

**"Weekly average flow"** is the sum of the preceding seven average daily flows divided by seven. Weeks are normally assumed to start on Monday.

## Acronyms

The following is a glossary of acronyms and abbreviations used in or related to the ACT Water Allocation Formula.

ACT	Alabama-Coosa-Tallapoosa River Basin
ADCNR	Alabama Department of Conservation and Natural Resources
ADECA	Alabama Department of Economic and Community Affairs

ADEM	Alabama Department of Environmental Management
AOWR	Alabama Office of Water Resources
APCO	Alabama Power Company
CE-QUAL-W2	A two-dimensional digital water quality model developed by WES.
COE	U.S. Army Corps of Engineers
COE-M	U.S. Army Corps of Engineers – Mobile District
CFS	Cubic feet per second.
DOI	United States Department of Interior
DRI	DRI/McGraw-Hill
EPA	United States Environmental Protection Agency
F&WS	Fish and Wildlife Service, United States Department of Interior
FERC	Federal Energy Regulatory Commission
GDNR	Georgia Department of Natural Resources
GEPD	Environmental Protection Division, Georgia Department of Natural Resources
GIS	Geographic Information System
GSA	Geological Survey of Alabama
HEC	Hydrologic Engineering Center, U.S. Army Corps of Engineers
HEC-5	A surface water digital modeling tool developed by HEC.
HEC-5Q	A surface water quality digital modeling tool developed by HEC
HUC	Hydrologic Unit Code
IWR	Institute for Water Resources, U.S. Army Corps of Engineers
MGD	Million gallons per day.
NMFS	National Marine Fisheries Service, National Oceanographic and Atmospheric Administration (NOAA), United States Department of Commerce
NPDES	National Pollutant Discharge Elimination System
NOAA	National Oceanographic and Atmospheric Administration, United States Department of Commerce
NPS	National Park Service, United States Department of Interior
NRCS	Natural Resources Conservation Service, United States Department of Agriculture (USDA), formally Soil Conservation Service (SCS)

NWD	Northwest Pacific Division, U.S. Army Corps of Engineers
NWS	National Weather Service, United States Department of Commerce
PMCL	Planning Management Consultants, Ltd.
SAD	South Atlantic Division, U.S. Army Corps of Engineers
SEPA	Southeastern Power Administration, United States Department of Energy
SOCO	Southern Company (Parent Company to Alabama Power Company, Georgia Power Company, and Southern Nuclear Operating Company)
STELLA	Systems Thinking Experimental Learning Laboratory, a software application developed by High Performance Systems, Inc.
USCOE	U.S. Army Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey, United States Department of Interior
WES	Waterway Experiment Station, U.S. Army Corps of Engineers



Section

3

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ACT Water Allocation Formula

## Section 3 - Conversion Factors

### Area

1 acre	=	43,560 square feet
1 square mile	=	640 acres

### Volume

1 acre foot	=	43,560 cubic feet
1 acre foot	=	325,853 gallons
1 cubic foot	=	7.4806 gallons
1 million gallons	=	3.0689 acre feet
1 cubic foot per second year	=	723.97 acre feet
1 cubic foot per second day	=	1.9835 acre feet

### Rates

1 cubic foot per second	=	448.836 gallons per minute
1 cubic foot per second	=	1.9835 acre feet per day
1 cubic foot per second	=	723.97 acre feet per year
1 million gallons per day	=	1.5472 cubic feet per second
1 gallon per minute	=	0.002228 cubic feet per second

Section

4

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ACT Water Allocation Formula

## Section 4 - ACT Committee

### Purpose

The purpose of this section is to create the "ACT Committee" and describe its duties with respect to the ACT Water Allocation Formula.

### Background and Concept

It is the intent that under this ACT Water Allocation Formula that the responsibilities of the ACT Committee be limited to those duties necessary to complete, implement and verify ongoing compliance with the ACT Water Allocation Formula. The ACT Commission is authorized to take separate, future action(s) to add to the responsibilities and duties of the ACT Committee consistent with the ACT Compact.

It is also the intent that the ACT Committee be limited to a small number of members for purposes of efficient operation.

### Committee Structure

The ACT Committee shall be composed of voting and non-voting members. The voting members shall consist of one member for the State of Alabama and one member of the State of Georgia. The voting member for the State of Alabama shall be the chief official of the Alabama Office of Water Resources or its successor. The voting member for the State of Georgia shall be the chief official of the Georgia Environmental Protection Division or its successor. Each voting members of the ACT Committee may appoint an alternate to represent them. The alternate members shall exercise the same power and authority, in a member's absence, as the member.

The non-voting members shall consist of a representative of the U.S. Geological Survey, a representative of the U.S. Army Corps of Engineers and a representative of the Alabama Power Company or their successors. The voting members of the ACT Committee may, by unanimous vote, select other non-voting entities to meet with the Committee on a regular basis.

Each voting member shall have one vote. All decisions of the Committee shall require unanimous approval of the voting members.

The Chairman of the ACT Committee shall rotate among the voting members on an annual basis and the term of the ACT Committee Chairman shall correspond with the same rotation as the Chairman of the ACT Commission.

## Committee Responsibilities

The duties and responsibilities of the ACT Committee, as defined in this section, are intended to be limited to those functions required to implement, maintain and verify compliance with the ACT Water Allocation Formula. The ACT Committee is hereby authorized and directed to:

- Implement all provisions of this ACT Water Allocation Formula;
- Monitor the status of the ACT Basin on a regular basis in accordance with the provisions of the ACT Water Allocation Formula;
- Recommend changes to the ACT Water Allocation Formula to the ACT Commission;
- Conduct forums or workshops to receive input regarding the ACT Water Allocation Formula;
- Update and maintain this ACT Water Allocation Formula agreement on a periodic basis;
- Appoint work groups to support and advise the Committee on various aspects of the ACT Water Allocation Formula; and
- Meet regularly to confer regarding the status and issues related to the Water Allocation Formula for the ACT Basin.

## Committee Operations

The ACT Committee shall decide its own method of functioning and operating procedures except that such procedures shall be consistent with the methods, procedures and balance of power established by the ACT Compact.

Section  
**5**

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ACT Water Allocation Formula

## Section 5 - Flood

### Purpose

This section describes the procedure for identifying and managing flood conditions in the ACT Basin.

### Background and Concept

The reservoir operators (U.S. Army Corps of Engineers and/or Alabama Power Company or their successors) within the ACT Basin are responsible for flood control due to statutory authorizations or Federal licensing requirements. It is not the intent of this agreement to encroach or interfere with the existing authority granted through Congressional actions or required under Federal Energy Regulatory Commission (FERC) licenses. Rather, it is the intent of this agreement that the reservoir operators continue to perform their authorized and licensed flood control duties.

The U.S. Army Corps of Engineers is Congressionally authorized to operate for flood control at the Federal reservoirs as shown in Table 1 below:

**Table 1**

<b>Dam</b>	<b>Reservoir</b>	<b>Flood Control Authorization</b>
Carters	Carters	PL 79-14
Allatoona	Allatoona	PL 77-228
Robert F. Henry	R. E. "Bob" Woodruff	PL 79-14
Millers Ferry	William "Bill" Dannelly	PL 79-14

The Alabama Power Company is licensed by the Federal Energy Regulatory Commission to operate for flood control at the private reservoirs as shown in Table 2 below:

**Table 2**

<b>Dam</b>	<b>Reservoir and Lake</b>	<b>FERC Project Number</b>
Weiss	Weiss	2146
H. Neely Henry	H. Neely Henry	2146
Logan Martin	Logan-Martin	2146
R. L. Harris	R. L. Harris	2628
Martin <sup>1</sup>	Martin <sup>1</sup>	349

1. Use of seasonal storage only.

### **Flood Indicators by Reach**

#### **Upper Coosa River Basin**

When Allatoona and Carters reservoirs are above the flood control guide curve and the flow at USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia is 15,000 cfs or greater, the upper Coosa River Basin shall be considered to be in flood condition.

#### **Tallapoosa River Basin**

When R. L. Harris and Martin reservoirs are above the flood control guide curve and the flow at USGS Gage # 02418500 near Tallassee, Alabama is 16,000 cfs or greater, the upper Tallapoosa River Basin shall be considered to be in flood condition

#### **Coosa and Alabama River Basins**

When Weiss and Logan Martin reservoirs are above the flood control guide curve and the flow at USGS Gage # 02407000 near Childersburg, Alabama is 34,000 cfs or greater, the Coosa and Alabama River Basins shall be considered to be in flood condition.

### **Notification**

The operating agencies (U.S. Army Corps of Engineers and/or Alabama Power Company or their successors) will notify the ACT Committee when flood conditions have begun, identify the portion of the basin or whether the entire basin is considered to be in flood condition, and when flood conditions are no longer in effect.

### **Effect of Flood Control Operations on Water Schedule**

Specific flood control operations are beyond the scope of the ACT Water Allocation Formula. In the event of a flood occurrence, the "Water Schedule" in Section 7 of this Water Allocation Formula, shall not adversely affect flood control

operations by the operating agencies. During periods of flood conditions, to the extent possible, the storage reservoirs within the basin should be returned to rule curve elevations in a balanced manner. However, all applicable flood control procedures will remain in effect. When flood conditions are considered to exist in one or more particular reaches, the consumption limits within the same reach(es), as contained in Section 7 of this Water Allocation Formula, are suspended for the duration of the period that flood conditions exist.

Section  
**6**

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ACT Water Allocation Formula

## Section 6 - Drought

### Purpose

This section:

- Delegates the responsibility for drought management in the ACT Basin to the ACT Committee;
- Requires the ACT Committee to prepare, for Commission approval, a drought plan for the ACT Basin; and
- Describes the interim procedures for identifying drought conditions and the types of mitigation responses that will be taken.

### Background and Concept

Hydrologic extremes, droughts and floods, are naturally occurring events within the normal hydrologic cycle. There is a history of drought conditions in the ACT Basin with varying degrees of severity and duration. Notable droughts occurred in 1941, 1954, 1968, 1981, 1986 and 1988.

There is currently no formal drought plan for the ACT Basin. During previous droughts, ad hoc drought committees, consisting of reservoir operators, federal agencies, and state departments, have been formed to mitigate drought impacts by managing the basin in a cooperative manner.

It is the intent of this section to task the ACT Committee with the responsibility to prepare a drought plan for the ACT Basin that describes the drought mitigation process and procedures. This plan shall conform with applicable criteria set forth in this section and, to the extent practical, be consistent with the interim drought procedures established in this section.

It is also the intent of this section to establish interim procedures to identify drought conditions and the types of mitigation actions that will be taken.

## Delegation of Responsibility for Interim Drought Plan

The ACT Committee is delegated the responsibility for drought mitigation activities in the ACT Basin. The ACT Committee is further authorized, at its discretion, to activate drought advisory committee(s) during drought periods as defined in this section.

## Preparation of Drought Plan

Due to the lack of an existing, formal drought plan, the States of Alabama and Georgia agree to develop such a plan within two years following the adoption and federal acceptance of this ACT Water Allocation Formula.

The drought plan shall include:

- Procedures for identifying the onset and progression of drought conditions.
- A tiered process of notices of awareness and mitigating actions. For example, notices of watch, warning, drought regarding the onset and progression of drought conditions and corresponding mitigating procedures that occur within each tier.
- Procedures for identifying the recession and termination of drought periods.

## Interim Drought Plan Process

In the event a drought occurs prior to the completion and adoption of the formal drought plan the following process shall be used.

The ACT Committee shall be responsible for monitoring conditions to determine when and where drought conditions are occurring within the ACT Basin. The ACT Committee will meet at least semiannually, once in the early spring and then again in the early summer, to evaluate water resource availability and drought preparedness. It is suggested that each voting member of the ACT Committee meet individually with their respective agencies involved in drought mitigation to maintain linkages at the state level.

The ACT Committee shall be responsible for implementing the interim drought procedures and other measures as may be mutually agreed upon to achieve the drought mitigation principles set forth in this section when it is determined that drought conditions are emerging in the entire ACT Basin or any portion thereof.

When the ACT Committee determines that drought conditions are emerging in the entire ACT Basin or any portion thereof, the ACT Committee is authorized to establish a "drought advisory committee" composed of representatives of agencies and individuals as the ACT Committee deems appropriate. If a drought advisory committee is formed it may advise the ACT Committee regarding drought conditions, mitigation activities and other drought related matters for the duration of the drought period. The drought advisory committee shall be considered to be disbanded upon ending the drought period unless the ACT Committee determines otherwise.



## Interim Drought Plan Principles

It is the intent of the interim drought plan that the drought conditions affecting the entire basin be mitigated and distributed throughout the entire basin. Within each state, the state shall have the right to determine the use and distribution of its share of water resources.

It is also the intent of the interim drought plan that drought conditions affecting a portion of the basin be cooperatively mitigated. When drought conditions occur in headwater areas, but not in downstream areas, it is the intent that relief be provided by reducing downstream flow requirements. When drought conditions occur in downstream areas, but not in headwater areas, it is the intent that relief be provided by increasing downstream flow requirements.

Regardless of the location and geographic extent of drought conditions, it is intended that state and local mitigation actions be initiated within the drought area to minimize the amount of mitigation in the form of altered streamflow required.

## Interim Drought Plan Program

The following constitutes the “Interim Drought Plan Program” for the ACT Basin. This interim program shall be considered null and void following preparation and adoption of the “drought plan” (as required above) for the ACT Basin by the ACT Commission. However, in the event a drought plan is not prepared and approved by the ACT Commission, droughts in the ACT Basin will continue to be operated in accordance with the interim drought plan (process and procedures) set forth in this section.

## Concept for Interim Drought Plan Procedures

The interim drought plan procedures are based on the concept of a tiered process. Each tier is defined quantitatively using accepted drought indicators to which the ACT Committee responds with appropriate mitigation actions. A tiered monitoring and response process will enable the ACT Committee and operators of water resource facilities to manage conditions as they occur and coordinate necessary actions. The interim drought plan procedure contains three tiers: watch, warning, and drought. Additional features of the interim procedures, such as the level of drought and the corresponding mitigation actions, are dependent on the tier. These actions are therefore further explained in conjunction with the appropriate tier. Each tier of the interim drought mitigation procedure is described by addressing the following topics:

- General Description;
- Indicators;
- Response Actions; and
- Progression / Recession.

The ACT Committee is responsible for the ongoing monitoring of the basin conditions to determine the onset, progression and recession of drought conditions as determined by the criteria set forth in this section. Despite the difficulty of recognizing the onset of drought, there are some scientific approaches that are useful in identifying the potential for drought. These include important meteorological indicators such as rainfall amounts and soil moisture indicators. Use of these indicators will provide signals to the ACT Committee that conditions are present which may be the initial stages of a drought.

Normal conditions are considered to exist in the ACT Basin except when the entire basin, or any portion thereof, is in either: a) flood condition as described in Section 5: or b) a Watch, Warning or Drought condition as defined in this section. During normal conditions, the ACT Committee will monitor the weekly Palmer Index and the three month Palmer Drought Index Probability Projections provided by the Climate Prediction Center. When conditions, as indicated by the Palmer Index, reach the levels indicated in “Tier 1: Watch” the drought process will be initiated. The Palmer Index information will be included as part of the monitoring database.

The ACT Commission, and by delegation the ACT Committee, has no enforcement power outside of those granted by the ACT Compact. Therefore, specific drought response actions, such as water conservation, and enforcement will continue to be the responsibility of the states through their regulatory agencies, local government and utilities.

## Tier 1: Drought Watch

### General Description

Drought Watch is the initial tier in the interim drought procedure. It is an indication of a potential drought period. For purposes of the interim drought procedures it is based on incipient meteorological drought as determined by the Palmer Index.

### Indicators

The initial drought indicator shall be the Palmer Drought Severity Index. The Palmer Index reference used for determining the onset of drought in the ACT Basin shall be the index maintained by the Climate Prediction Center. The Palmer Index shall be used to determine whether a single climatological area covering a portion of the basin or multiple climatological areas covering the entire ACT Basin indicate an area is potentially entering a drought condition. When the Palmer Index reaches a value of  $-2.00$ , the ACT Committee shall declare a drought Watch. The ACT Committee shall define the specific geographic portion of the ACT Basin to be included in the drought Watch area. The ACT Committee may amend the geographic area based on continued monitoring of the Palmer Index.

### Response Actions

The declaration of a drought Watch area signals activities such as: a) increased monitoring of basin conditions; b) establishing agency linkages between agencies within the affected states to ensure drought preparedness; and c) creating citizen awareness regarding the drought conditions. If the ACT Committee decides to establish a drought advisory committee, the membership is selected and notified.

The increased monitoring of meteorologic and hydrologic conditions will add monitoring of the three-month Palmer Drought Index Probability, securing of recent records of precipitation data and streamflow. The ACT Committee may add additional indicators or revise the geographic area of the basin considered to be entering drought conditions as deemed appropriate.

Basic analysis of supporting data, such as precipitation deficit ratios (the normally expected precipitation to actual expressed in a percent) will be calculated for an appropriate recent period. Soil moisture values, where available, will be used to confirm Palmer Index values. The rate and nature of change in any of these factors will be evaluated. Streamflow data for the drought monitoring streams listed in Table 3, Drought Indicator Streams and Gages will be plotted against the 10, 15 and 20 percent exceedance curves for these stations.

To begin a forecast of potential future conditions the short and long-range weather forecasts for the basin and sub basins will be monitored.

Other actions that may be undertaken include:

Those responsible for implementing drought response actions, including reservoir operators, at the state level will be notified by their respective states and appraised of the situation by the ACT Committee. It is suggested that those responsible for coordinating drought response activities at the state level begin the implementation of their drought response plans. A designated Federal representative (Corps of Engineers or their successor) will likewise notify the appropriate Federal agencies.

The media will be notified of the declaration of the drought Watch status and the affected area of the basin identified. This opportunity will be used to inform the public of the tiered drought response process and the availability of additional information regarding conditions, status, and implementing actions.

#### Progression / Recession

The ACT Committee will continue to monitor conditions and determine if the drought conditions are becoming progressively worse or decreasing. When hydrologic conditions decline to the levels indicated in Tier 2: Watch, the ACT Committee shall revise the declaration.

If drought conditions regress so the Palmer index is above  $-2.00$ , the ACT Committee shall declare the drought ended.

### Tier 2: Drought Warning

#### General Description

Drought Warning is the second phase of the interim drought procedure. It is based on indications of hydrological drought. For purposes of the interim drought procedure this is indicated by volume of streamflow in selected monitoring streams.

#### Indicators

The second drought indicator shall be streamflow in selected drought monitoring streams. Streamflow shall be measured on unregulated, gauged streams located throughout the basin. The streams and gage locations are listed in Table 3. When

streamflow drops below the 20% low flow exceedance curve the corresponding area shall be considered to be in drought Watch. The corresponding flow levels to indicate seasonal drought flows at each stream monitoring location are attached as Illustrations 1 through 8.

Table 3  
Drought Indicator Streams and Gages

Stream	Gage Identification
Chattooga River above Gaylesville, AL	02398300
Etowah River at Canton, GA	02392000
Hatchet Creek below Rockford, AL	02408540
Conasauga River at Tilton, GA	02387000
Cahaba River at Centerville, AL	02424000
Mulberry Creek at Jones, AL	02422500
Little Tallapoosa River near Newell, AL	02413300
Tallapoosa River near Heflin, AL	02412000

Illustration 1  
USGS Gage # 02398300  
Chattooga River above Galesburg, Alabama

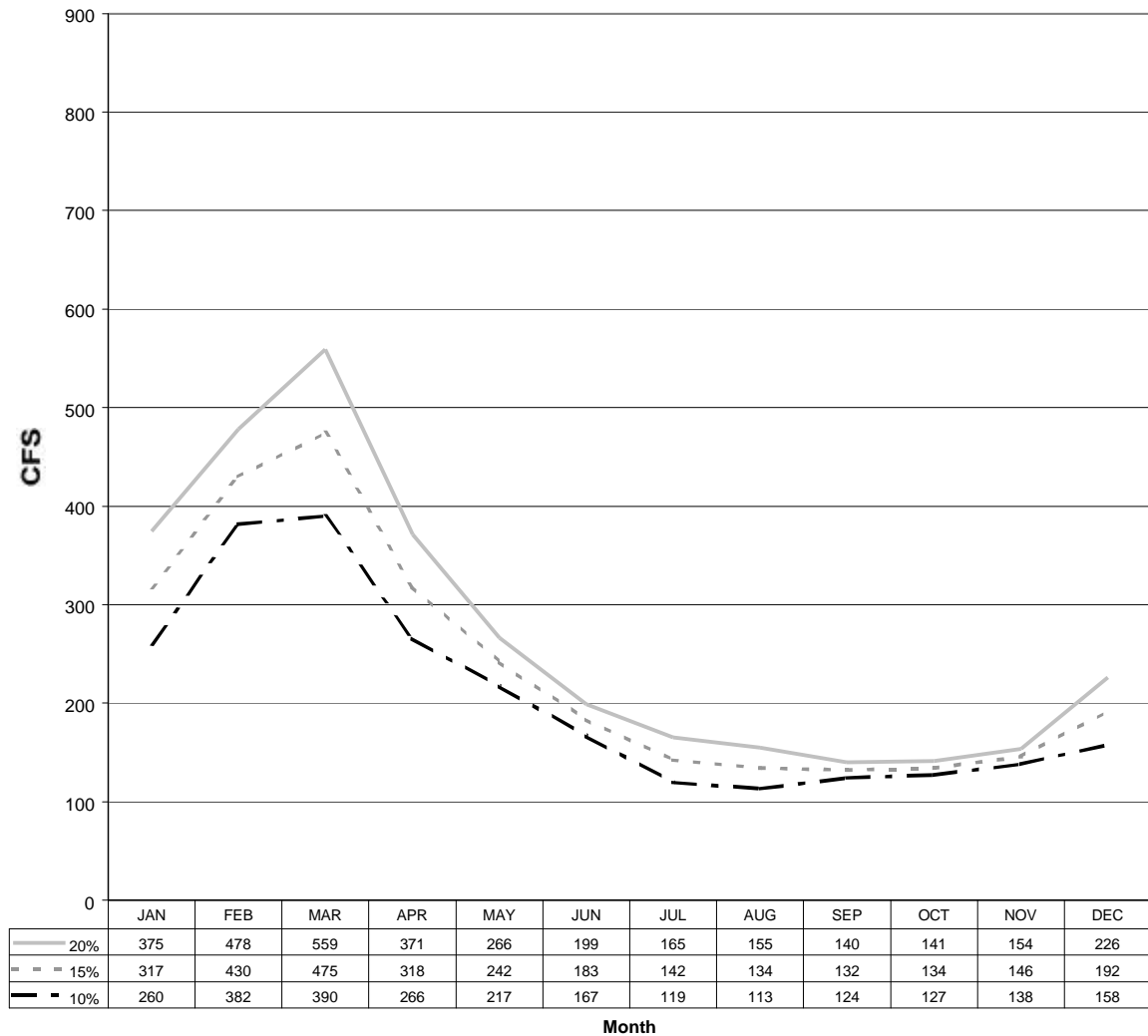


Illustration 2  
USGS Gage # 02392000  
Etowah River at Canton, Georgia

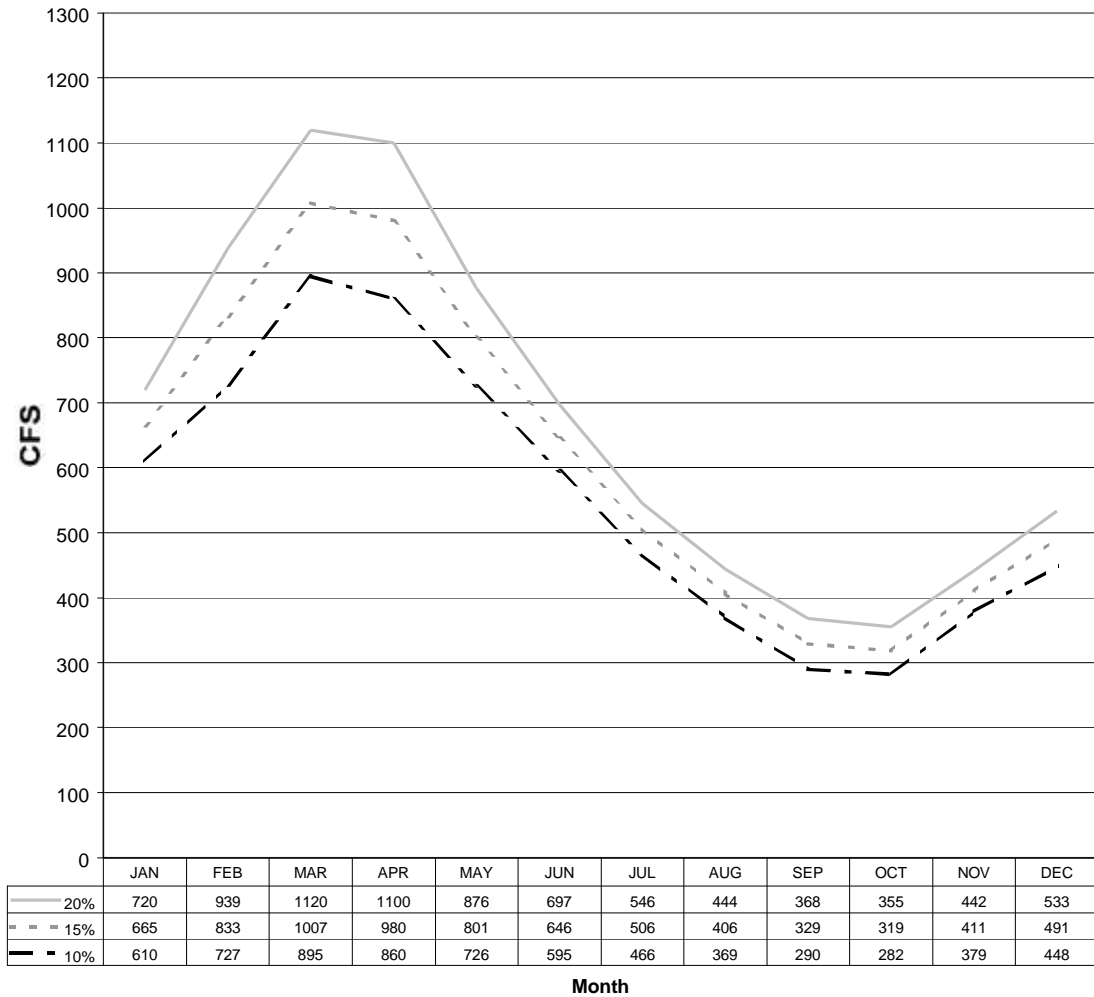


Illustration 3  
USGS Gage # 02408540  
Hatchet Creek below Rockford, Alabama

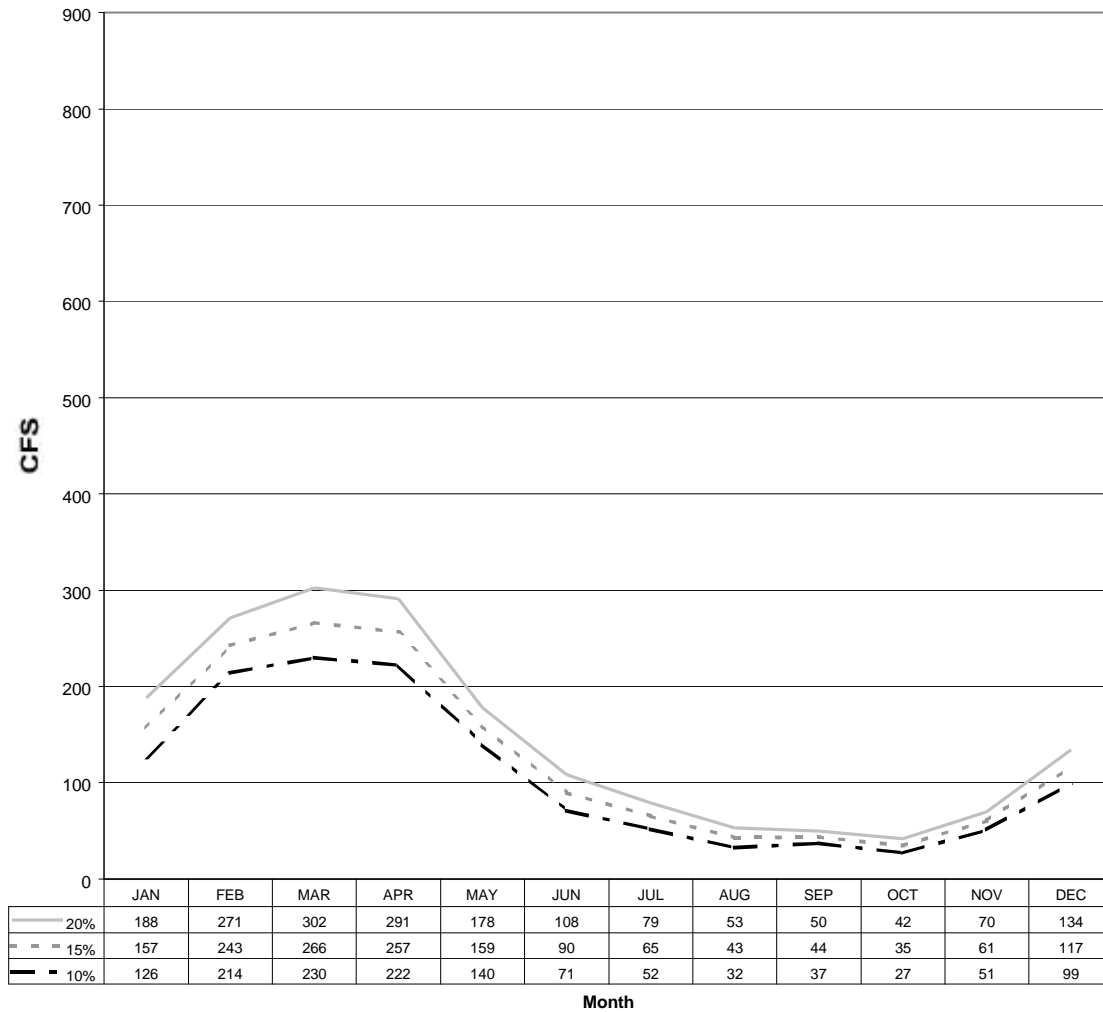


Illustration 4  
USGS Gage # 02387000  
Conasauga River at Tilton, Georgia

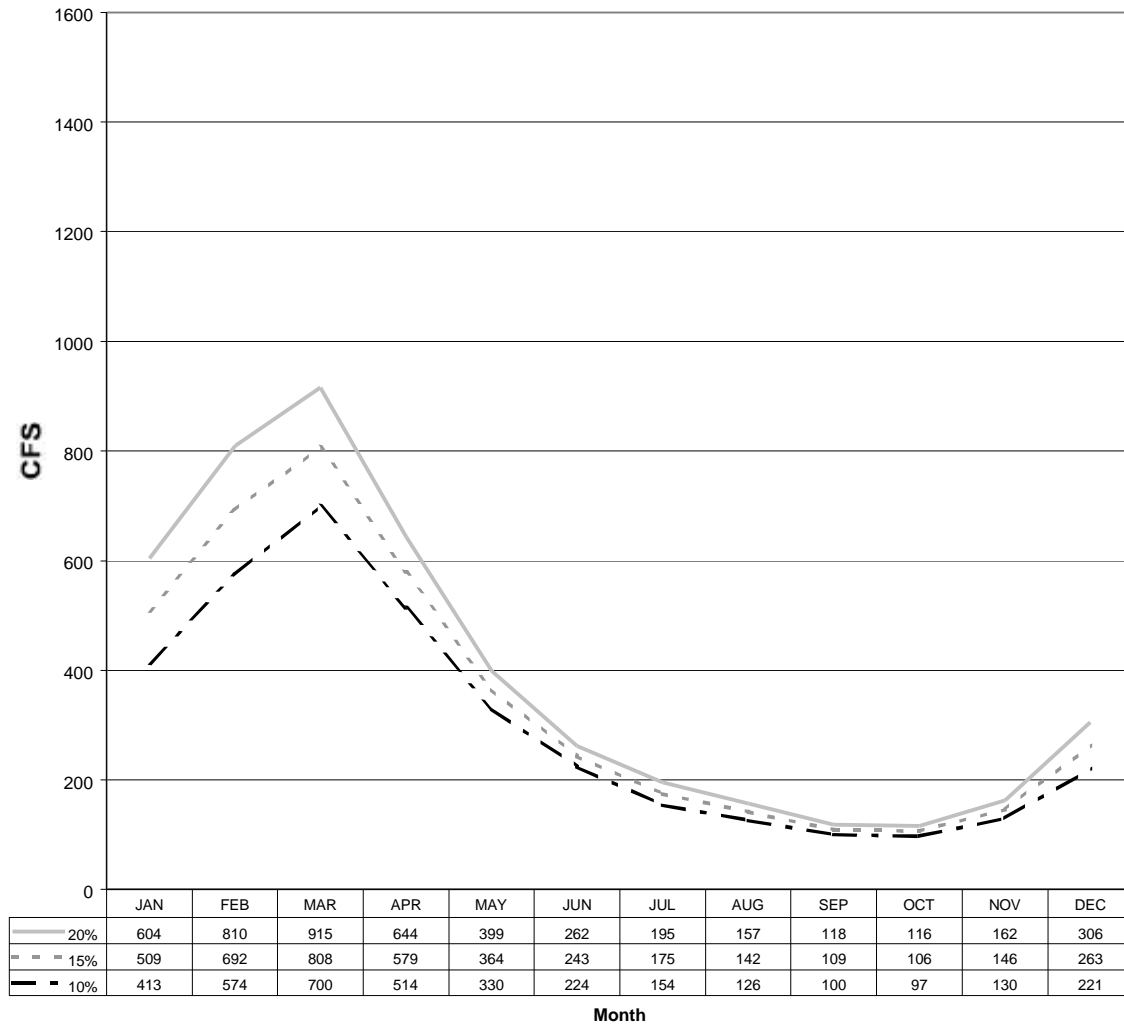




Illustration 5  
USGS Gage # 024424000  
Cahaba River at Centreville, Alabama

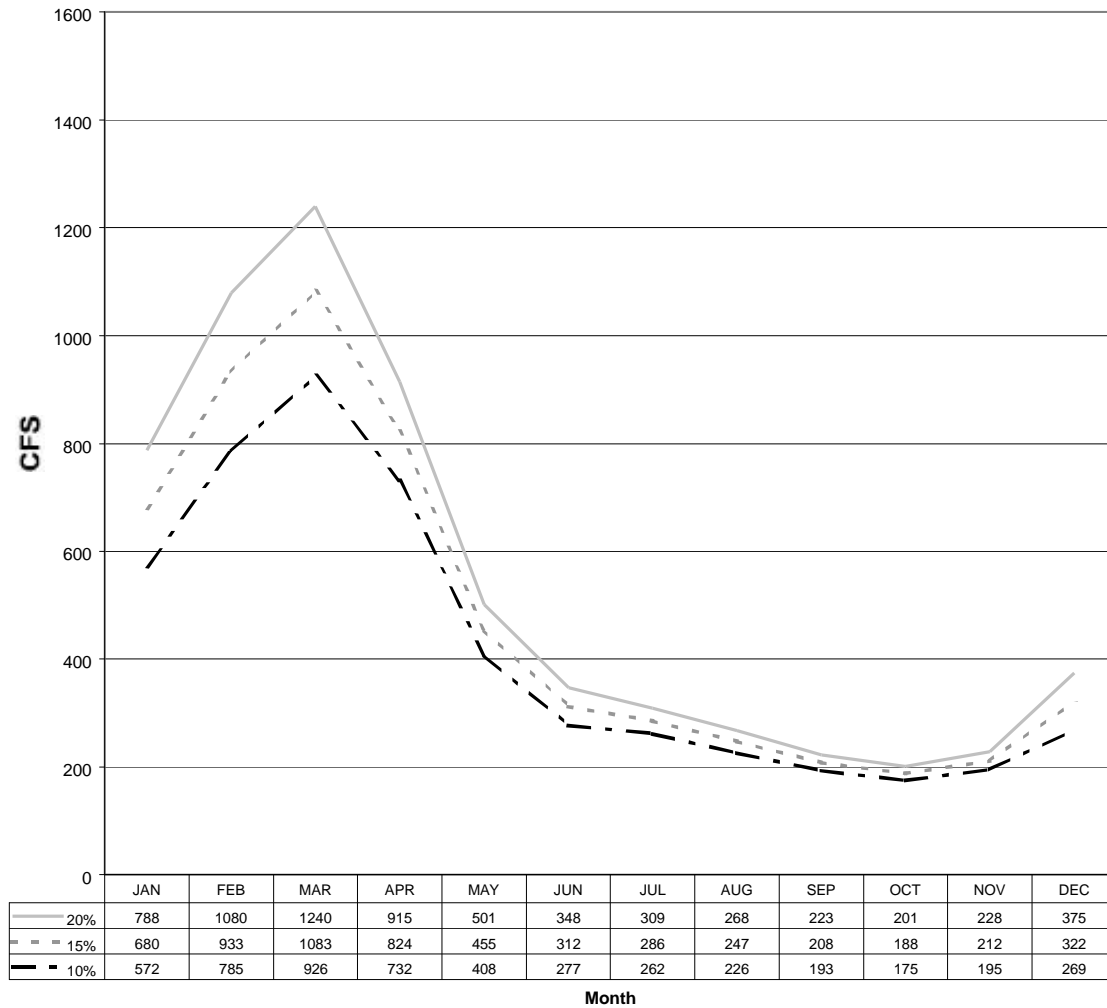


Illustration 6  
USGS Gage # 02422500  
Mulberry Creek at Jones, Alabama

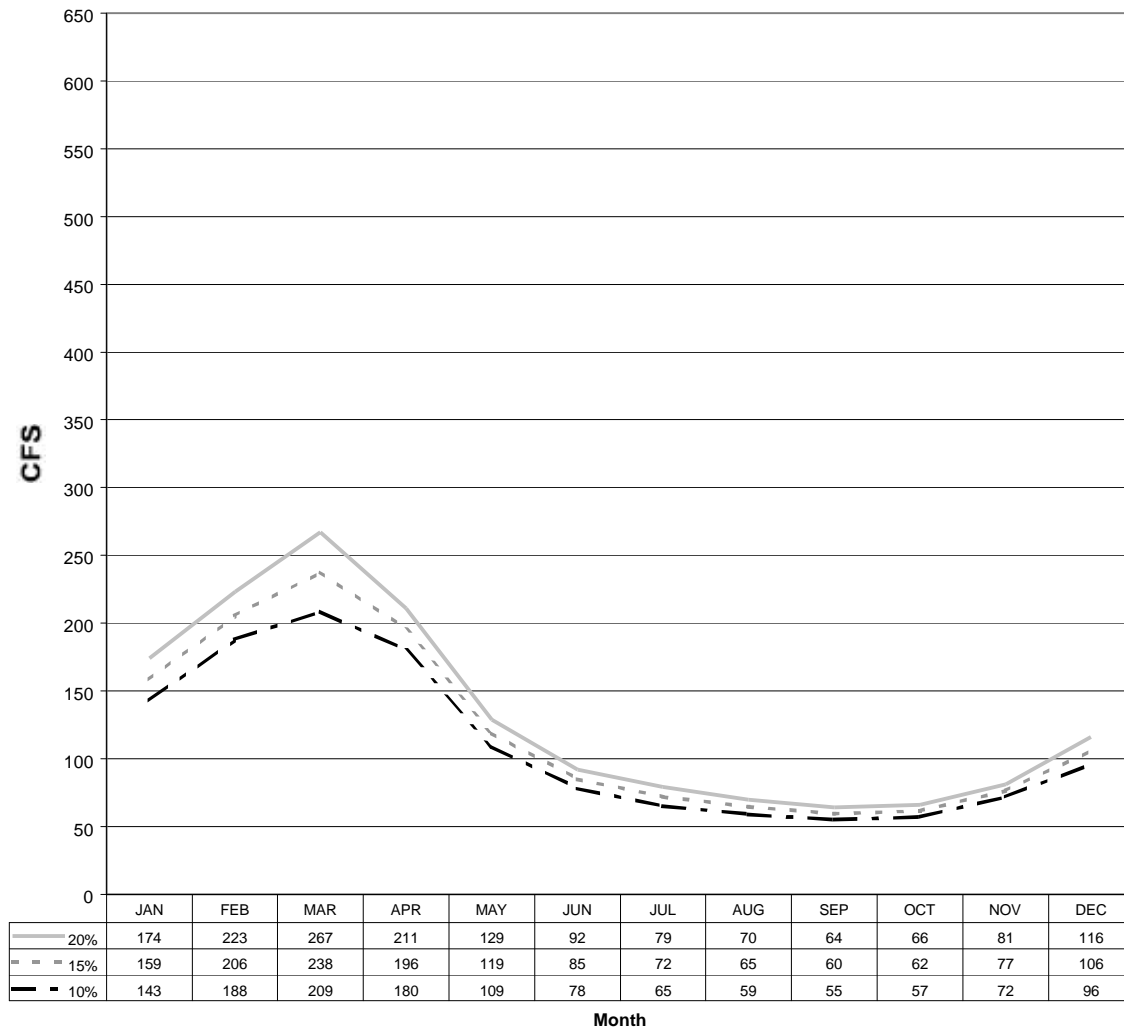


Illustration 7  
USGS Gage # 002413300  
Little Tallapoosa River near Newell, Alabama

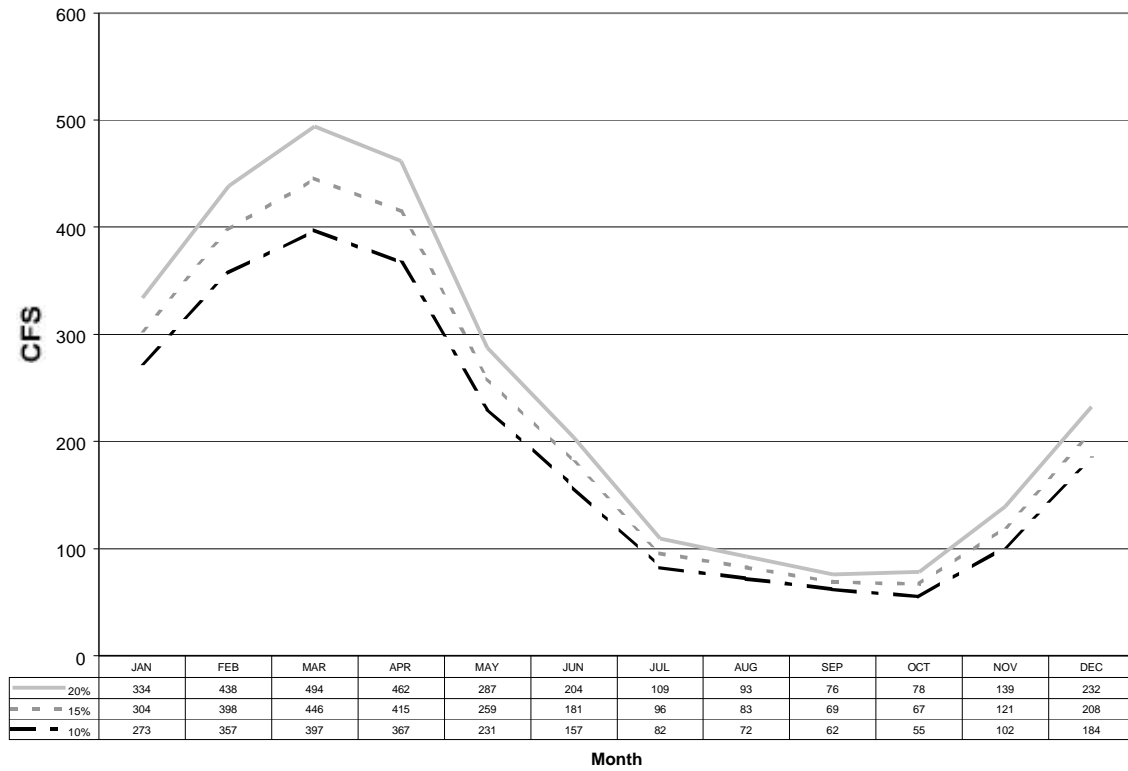
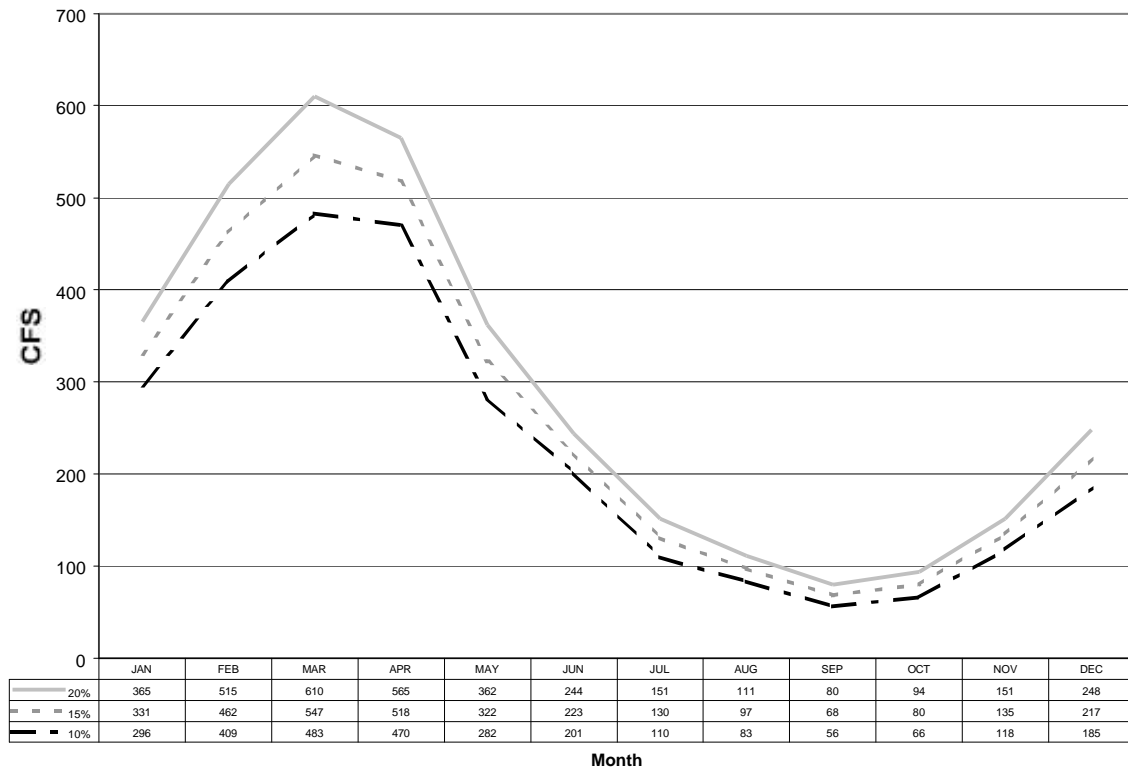


Illustration 8  
USGS Gage # 002412000  
Tallapoosa River near Heflin, Alabama



### Response Actions

Effective evaluation of the situation will require that technical experts from primary data gathering agencies be organized to analyze the situation and provide recommendations to the ACT Committee on a weekly basis.

All of the monitoring and response activities initiated under Tier 1: Watch are continued and intensified. Once a drought Warning has been activated, it is imperative to increase and expand monitoring. Factors such as reservoir conditions should be evaluated because, depending on the season, if stream conditions continue to deteriorate, the reduced inflows into storage reservoirs could impact reservoir levels. In addition to increasing the monitoring of streamflow conditions, the output of streamflow prediction models such as the National Weather Service River Forecast System can be added to the monitoring. This data and model results will be added to the monitoring database.

The states must act independently and in coordination to implement appropriate procedures under their respective authorizations. For example, this is the time to publicize the need to further conserve water and encourage measures that can, potentially, mitigate the impacts of a water shortage. Although the ACT Committee can recommend water conservation, it must be implemented through the individual states or by local agencies. Those agencies responsible for coordinating drought response efforts at the state level must contact municipal and industrial and other users requesting a voluntary reduction in water use. To assist the states in these efforts, the ACT Committee can elect to work as a clearinghouse for drought related information, indirectly promote conservation in both the public and private sectors and provide assistance in the development or implementation of local drought response plans.

Utilizing the media, an aggressive public awareness program will be initiated. The objectives of this effort will be to keep the public informed of the current basin and drought conditions, to explain present and anticipated actions by the ACT Committee if drought conditions continue, and disseminate other pertinent material.

During the period of drought Warning the ACT Committee can temporarily reduce the streamflow requirements of the system. Such reductions must be by unanimous consent of the voting members of the ACT Committee. The reductions in streamflow requirements automatically lapse when the recession of drought conditions changes from Warning to Watch unless another time period is specifically designated by the ACT Committee at the time the reductions in streamflow requirements are approved.

During a drought Warning period the ACT Committee may successively reduce requirements as many times as necessary and by the amounts deemed appropriate based on drought conditions.

### Progression / Recession

If drought conditions progress to the levels indicated in the third tier of the interim drought procedure, the ACT Committee will declare a Drought and proceed with the appropriate drought mitigation activities. See Tier 3: Drought.

If drought conditions recede the ACT Committee shall monitor conditions and issue an upgrade in status to drought Watch. This shall occur when streamflow in the drought indicator stream(s) is above the 15% low flow exceedance curve, unless another target is designated by the ACT Committee at the time the reductions in status flow requirements are approved.

### Tier 3: Drought Declaration

#### General Description

The formal declaration of Drought is the third tier of the interim drought procedure. For purposes of the interim drought procedure it is based on extended periods of below normal precipitation and hydrologic drought. However, since hydrologic drought includes seasonal variations the decrease in streamflow conditions may occur during a typical wet period of the hydrologic cycle and not directly influence reservoir levels.

#### Indicators

The third drought indicator is the elevation of storage reservoirs. The storage reservoirs within the ACT Basin that are used as indicators are listed in Table 4.

Table 4  
Drought Indicator Storage Reservoirs

Reservoir	Basin
Allatoona	Coosa
Carters	Coosa
Weiss	Coosa
H. Neely Henry	Coosa
Logan Martin	Coosa
R.L. Harris	Tallapoosa
Martin	Tallapoosa

The ACT Committee, with input from the respective reservoir operating agencies, shall determine the elevation guide curve to be used at each reservoir. The reservoir guide curve will consider the time of year that the drought is occurring and the severity of drought conditions. The guide curve shall be used to trigger further reductions in flow requirements to sustain the system at reduced levels for the expected duration of the drought.

#### Response Actions

The ACT Committee must take strong and significant steps to increase public and private awareness and ensure that appropriate measures are taken to safeguard both the public good and water resources within the ACT Basin once a Drought is declared. The ACT Committee will expand monitoring efforts to include an inventory of threats of water shortages, conduct initial assessments of impacts and issue warnings as needed.

Similar to the drought Warning tier, the ACT Committee can temporarily reduce streamflow requirements during declared droughts. There shall be a general guide to attempt to operate reservoirs to maintain streamflow above the 10% low flow exceedance levels at all times.

During a prolonged drought it may necessary for the ACT Committee to further reduce or temporarily eliminate certain consumptive water uses within the basin. During a declared Drought, the ACT Committee will determine the consumption that can be allowed based on existing resources and make their recommendation to the ACT Basin Commission. Each state will then take independent actions to comply with the specified reductions in consumption.

Public participation and understanding of the droughts in this situation is critical. The ACT Committee will begin issuing regular news reports on the condition of the basin, actions that have been taken and anticipated future actions.

#### Progression / Recession

Despite this being the last tier in the sequence it does not mean that drought conditions are the worst they could possibly become. The ACT Committee will continue to monitor the basin conditions and take additional actions as deemed necessary if the drought does not go into recession. If conditions warrant, the ACT Committee may request the respective Governors to declare state emergencies and seek Federal emergency assistance.

Recession from drought to warning status shall be based on reservoir levels recovering to the extent they exceed their low level guide curve and streamflow in the drought monitoring streams being above the 10% low flow exceedance curve. Conditions shall then be upgraded to drought warning status.

#### Content of Streamflow Reduction Notices

Wherever the ACT Committee approves a reduction in streamflow requirements it shall be in writing and signed by the respective state representatives on the ACT Committee. The notice shall:

- generally describe the basin area experiencing drought that is the cause for the reduction or increase in streamflow required;
- specify the change in required streamflow; and
- state the conditions under which the change in streamflow reverts to prior conditions or include the default condition if one is not specified by the ACT Committee. Copies of the signed notices will be sent to the ACT Commissioners and the appropriate reservoir operating agencies.

Section  
**7**

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## ACT Water Allocation Formula

# Section 7 - Water Schedule

### Purpose

This section sets forth the water schedule that establishes the quantities, rates, timing, procedures and limits related to allocating water in the ACT Basin.

### Background and Concept

The concept is to share water within the ACT Basin by establishing: requirements for flows crossing the Alabama - Georgia state boundary; procedures for its use, development of storage; and limits for consumption.

The scope of the water schedule is based on combinations of flow, storage and consumption. These factors are applied in the small basin areas as appropriate. These factors are also directly related to the application of monitoring procedures in the respective small basins.

### Geography

The Alabama - Coosa - Tallapoosa River Basin comprises three major river systems and all of their related tributaries as defined in this agreement.

The Alabama River Basin is an interstate river basin within the states of Alabama, Georgia and a small portion in Tennessee. The Alabama River, the principle stream draining the Alabama Basin, is formed by the confluence of the Coosa and Tallapoosa Rivers in the vicinity of Montgomery, Alabama. The Cahaba River is a tributary to the Alabama River. The outflow from the Alabama River is to Mobile River and Bay.

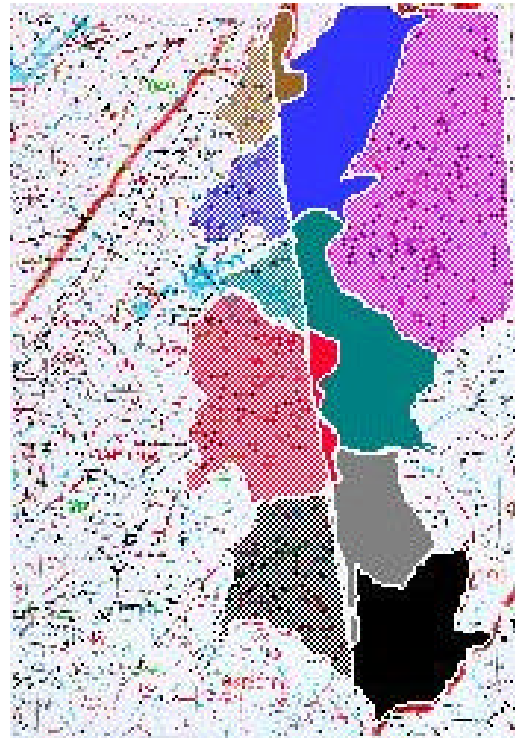
The Coosa River Basin is an interstate river basin with headwaters primarily located in Georgia, a minor headwater area in Tennessee, and flowing into Alabama. Several rivers, streams and some tributary drainage areas and Weiss Lake cross the Alabama - Georgia state boundary. The outflow from the Coosa River is at the confluence with the Tallapoosa River into the Alabama River.



The Tallapoosa River Basin is an interstate river basin with headwaters in Georgia and flowing into Alabama. The Tallapoosa River crosses the state boundary as two separate basins; the Tallapoosa River Basin and the Little Tallapoosa River Basin. The Little Tallapoosa River merges with the Tallapoosa River in Alabama at R. L. Harris Reservoir. Some associated streams and tributary drainage areas also cross the Alabama - Georgia state boundary. The outflow from the Tallapoosa River is at the confluence with the Coosa River into the Alabama River.

The interstate basins, where they cross or directly influence flows that cross the Alabama - Georgia state boundary, are divided into nine basin areas. These basin areas are listed and graphically depicted below:

- Little River Basin
- North Chattooga River Basin
- Chattooga River Basin
- Coosa River Basin above USGS Gage # 02397000 (Mayo's Bar)
- Big Cedar Creek/Coosa River Basin
- Terrapin Creek Basin
- Tallapoosa River Basin
- Little Tallapoosa River Basin
- Ungaged Tallapoosa Basin Area



## In-Stream Flow

In-stream flow at USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia

### In-stream Flow

In-stream flow as measured at USGS Gage # 02397000 near Rome, Georgia (Mayo's Bar), is established at 2,350 cfs. This in-stream flow will be seasonally adjusted as identified in the sub-sections "Maintenance of In-Stream Flow," and in the "Coosa River Basin above USGS Gage # 02397000 (Mayo's Bar)" near Rome, Georgia below.

### Maintenance of In-stream Flow

The U.S. Army Corps of Engineers, or its successor, will operate the Allatoona and Carters reservoirs to meet the in-stream flow in the following manner:

- 1) The in-stream flow will be maintained as a seasonally adjusted minimum weekly average flow.
- 2) The minimum weekly average flow for the months of April, May and June will be in-stream flow plus 200 cfs.
- 3) The minimum weekly average flow for the months of September, October and November will be in-stream flow less 200 cfs.
- 4) In all other months the minimum weekly average flow will be equal the in-stream flow.
- 5) The U.S. Army Corps of Engineers will maintain the minimum weekly average flow at all times with releases from the upstream Federal reservoir projects (Allatoona and Carters).
- 6) When the flow at USGS Gage # 02397000 (Mayo's Bar) exceeds the required flow, the U.S. Army Corps of Engineers will attempt to restore Allatoona and Carters reservoirs to the flood control guideline elevation.

### In-stream flow in the Alabama River at Montgomery, Alabama

#### In-stream Flow

An in-stream flow at Montgomery, Alabama as measured from the combined discharges at Walter Bouldin, Jordan (Coosa River) and Thurlow (Tallapoosa River) dams, is established at 2,900 cfs plus the in-stream flow at USGS Gage # 02397000 (Mayo's Bar) as described above.

#### Maintenance of In-stream Flow

The Alabama Power Company, or its successor, will operate the Coosa and Tallapoosa River reservoirs to meet the in-stream flow in the following manner:

- 1) The in-stream flow will be maintained as a minimum weekly average flow.
- 2) The Alabama Power Company will maintain the minimum weekly average flow at all times with releases from the Alabama Power Company's upstream projects whenever those projects are above seasonally varying minimum pools.
- 3) When the flows at Montgomery, Alabama exceed the required flow, the Alabama Power Company will attempt to restore Alabama Power Company reservoirs to their respective flood control guideline elevations.

## Reservoirs

### Construction of In-stream Reservoirs

If a new in-stream reservoir is constructed in the State of Georgia, both the U.S. Army Corps of Engineers and the State of Georgia shall establish a minimum release from that reservoir equal to 40% of mean annual inflow.

### Construction of Off-stream Reservoirs

If a new off-stream reservoir is constructed in the State of Georgia to divert and store water from a stream by pumping or other means, both the U.S. Army Corps of

Engineers and the State of Georgia shall include a requirement for a minimum streamflow below which no diversion or pumping shall take place, such minimum to equal 40% of mean annual inflow.

### Existing Non-Federal Reservoirs

Existing dams owned by state and local governments, or subdivisions thereof, may not modify outflow works in any way that would reduce minimum releases from the reservoir unless that reduction in minimum release is offset by an equal or greater increase in minimum release from another storage facility in the same basin.

## Coosa River Basin above USGS Gage # 02397000 (Mayo's Bar)

### Basin Description

The Coosa River Basin above USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia totals 4040 square miles lying entirely within the State of Georgia and includes hydrologic unit codes:

03150101	03150104
03150102	03150105 – 150
03150103	

### Gaging Station

Location: Latitude 34°12'01", Longitude 85°15'24," on left bank of the Coosa River attached to left lock wall of Mayo's Bar lock near upstream end, 1.5 miles upstream from Webb Creek, 6 miles southwest of Rome, Georgia, 7.5 miles downstream from confluence of Oostanaula and Etowah Rivers, and at river mile 278.6.

### Conditions

#### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 179 MGD on an average annual basis within the Coosa River Basin above USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

#### Expansion of Water Consumption

The State of Georgia may increase the consumption limit above 179 MGD on an average annual basis within the Coosa River Basin above USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia provided that for each increase in consumption of 1 MGD, the in-stream flow at USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia will increase by 1.5472 cfs. To guarantee the viability of both the increased water consumption and the in-stream flow, the State of Georgia agrees that provisions for adequate reservoir storage and minimum releases must be made before any increases in consumption will be permitted.

### Allocation of Reservoir Storage in Federal Projects

The U.S. Army Corps of Engineers may contract for the sale of reservoir storage to support all existing intake facilities at existing water use quantities in Carters and Allatoona reservoirs, provided those state water permits when combined with other state water permits in the Coosa River Basin above USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia do not exceed water consumption limits in this basin area.

The U.S. Army Corps of Engineers may contract for the sale of reservoir storage to support additional consumption above levels existing at the time of the adoption of the Allocation Formula by the voting members of the ACT Commission in the Coosa River Basin above USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia both in the Federal reservoirs, either Allatoona or Carters, and downstream of the dams of those projects. When computing the quantity of storage required, the U.S. Army Corps of Engineers must consider both the water to be consumed and the corresponding increase required to the in-stream flow at USGS Gage # 02397000 (Mayo's Bar) consistent with the paragraph specifying conditions for modifications at existing federal reservoirs.

Any allocation, reallocation, and/or sale of reservoir storage in Federal reservoirs for water supply shall comply with "Section 9, Water Supply Contracts," and "Section 10, Compensation" of the ACT Water Allocation Formula. Compliance with "Section 10, Compensation," shall be ensured by the State of Georgia for allocations at Federal reservoirs in the Georgia portion of the ACT Basin.

## Little River Basin

### Basin Description

The Little River Basin above the Alabama - Georgia state boundary totals 43 square miles lying entirely within the State of Georgia and includes hydrologic unit codes:

03150105-070

03150105-090

### Gaging Station

There is no gaging site near the Alabama - Georgia state boundary. The closest gaging station is at USGS Gage # 02399200 near Blue Pond, Alabama with a drainage area of 199 square miles.

### Conditions

#### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 2 MGD on an average annual basis within the Little River Basin. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

#### Construction of New Reservoirs

No new reservoirs will be permitted in the Little River Basin.

### Chattooga River Basin

#### Basin Description

The Chattooga River Basin above the Alabama - Georgia state boundary totals 250 square miles lying entirely within the State of Georgia and includes hydrologic unit codes:

03150105-010

03150105-020

#### Gaging Station

There is no gaging site near the Alabama - Georgia state boundary. The closest gaging station is USGS Gage # 02398300 above Gaylesville, Alabama with a drainage area of 366 square miles. A new gaging site will be established according to the gaging network plan contained in Section 11 of the ACT Water Allocation Formula.

#### Conditions

##### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 9 MGD on an average annual basis within the Chattooga River Basin. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

##### Expansion of Water Consumption

The State of Georgia may increase the consumption limit above 9 MGD on an average annual basis within the Chattooga River Basin provided that for each increase in consumption of 1 MGD, the low flow at the state boundary will increase by 1.5472 cfs. To guarantee the viability of both the increased water consumption and the in-stream flow, the State of Georgia agrees that provisions for adequate reservoir storage and minimum releases must be made before any increases in consumption will be permitted.

### North Chattooga River Basin

#### Basin Description

The North Chattooga River Basin above the Alabama - Georgia state boundary totals 54 square miles lying entirely within the State of Georgia and includes hydrologic unit code:

03150105-040

## Gaging Station

There is no gaging site near the Alabama - Georgia state boundary. The closest gaging station is at USGS Gage # 02398300 above Gaylesville, Alabama with a drainage area of 366 square miles.

## Conditions

### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 2 MGD on an average annual basis within the North Chattooga River Basin. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

## Big Cedar Creek/Coosa Basin

## Basin Description

The Big Cedar Creek/Coosa River Basin above the Alabama - Georgia state boundary totals 295 square miles lying entirely within the State of Georgia. The basin, as defined in this Water Allocation Formula, includes Big Cedar Creek and the drainage directly into the Coosa River between the USGS Gage # 02397000 (Mayo's Bar) near Rome, Georgia and the Alabama - Georgia state boundary and includes hydrologic unit codes:

03150105-160  
03150105-170

03150105-190

## Gaging Station

There is no gaging site near the Alabama - Georgia state boundary. The closest upstream gage is USGS Gage # 02397000 (Mayo's Bar) and the next downstream measurement point is Weiss Dam, Alabama.

## Conditions

### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 10 MGD on an average annual basis within the Big Cedar Creek/Coosa River Basin. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

### Construction of New Reservoirs

No new reservoirs will be constructed within the Big Cedar Creek/Coosa Basin.

### Expansion of Water Consumption

The State of Georgia may increase the consumption limit above 10 MGD on an average annual basis within the Big Cedar Creek/Coosa River Basin up to a

maximum of 20 MGD provided that for each increase in consumption of 1 MGD, the in-stream flow delivery at USGS Gage # 02397000 (Mayo's Bar) will increase by 1.5472 cfs. To guarantee the viability of both the increased water consumption and the in-stream flow, Georgia agrees that provisions for adequate reservoir storage and minimum releases must be made before any increases in consumption will be permitted.

## Terrapin Creek Basin

### Basin Description

The Terrapin Creek basin above the Alabama - Georgia state boundary totals 19 square miles lying entirely within the state of Georgia and includes hydrologic unit codes:

03150105-210

03150105-230

### Gaging Station

There is no gaging site near the Alabama - Georgia state boundary. The closest gaging station is at USGS Gage # 02400100 at Ellisville, Alabama with a drainage area of 252 square miles.

### Conditions

#### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 1 MGD on an average annual basis within the Terrapin Creek basin. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

## Tallapoosa River Basin

### Basin Description

The Tallapoosa River Basin above the Alabama - Georgia state boundary totals 314 square miles lying entirely within the State of Georgia and including hydrologic unit codes:

03150108-020  
03150108-030

03150108-040

### Gaging Station

There is no gaging site near the Alabama - Georgia state boundary. The closest gaging station is at USGS Gage # 02412000 near Heflin, Alabama with a drainage area of 448 square miles. A new gaging site will be established according to the gaging network plan contained in Section 11 of the ACT Water Allocation Formula.

## Conditions

### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 3 MGD on an average annual basis within the Tallapoosa River Basin. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

### Expansion of Water Consumption

The State of Georgia may increase the consumption limit above 3 MGD on an average annual basis within the Tallapoosa River Basin provided that for each increase in consumption of 1 MGD the low flow at the state boundary will increase by 1.5472 cfs. To guarantee the viability of both the increased water consumption and the in-stream flow, Georgia agrees that provisions for adequate reservoir storage and minimum releases must be made before any increases in consumption will be permitted.

## Little Tallapoosa River Basin

### Basin Description

The Little Tallapoosa River Basin above the Alabama - Georgia state boundary and totals 320 square miles lying entirely within the State of Georgia and including hydrologic unit codes:

03150108-180

03150108-190

### Gaging Station

There is no gaging site near the Alabama - Georgia state boundary. The closest gaging station is at USGS Gage # 024113300 near Newell, Alabama with a drainage area of 406 square miles. A gaging site will be established according to the gaging plan contained herein.

## Conditions

### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 11 MGD on an average annual basis within the Little Tallapoosa River Basin. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

### Expansion of Water Consumption

The State of Georgia may increase the consumption limit above 11 MGD on an average annual basis within the Little Tallapoosa River Basin provided that for each increase in consumption of 1 MGD the low flow at the state boundary will increase by 1.5472 cfs. To guarantee the viability of both the increased water consumption and



the in-stream flow, Georgia agrees that provisions for adequate reservoir storage and minimum releases must be made before any increases in consumption will be permitted.

## Ungaged Tallapoosa Basin Area

### Basin Description

Ungaged areas of the Tallapoosa River Basin above the Alabama - Georgia state boundary totals 16 square miles lying entirely within the State of Georgia and including hydrologic unit codes:

03150108-210

03150108-230

### Gaging Station

There is no gaging site near the Alabama - Georgia state boundary. The closest gaging station is at USGS Gage # 02412000 near Heflin, Alabama with a drainage area of 448 square miles.

### Conditions

#### Water Consumption

The State of Georgia agrees to permit the consumption of no more than 1 MGD on an average annual basis within the ungaged areas of the Tallapoosa River Basin. The State of Georgia also agrees not to permit consumption on any day greater than 1.5 times the average annual consumption. The State of Georgia further agrees not to permit consumption for any consecutive 60-day period greater than 1.25 times the average annual consumption.

Section

8

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ACT Water Allocation Formula

## Section 8 - Water Quality

### Purpose

The purpose of this section is to identify existing requirements for water quality in the ACT Basin and to clarify procedures, methods and responsibilities for maintaining water quality consistent with the intent of the ACT compact.

### Background

Pursuant to applicable state and federal laws, each of the signatory states to this ACT Water Allocation Formula has established water use classifications and water quality standards for certain waters within the ACT Basin. The signatory states acknowledge that each state has a responsibility and right to establish water use classifications and water quality standards for the waters within their borders. The purpose of this section is to ensure that while recognizing and maintaining a state's sovereignty over water quality issues arising within a state, the ACT Water Allocation Formula shall not cause or contribute to degradation of existing water quality or violations of any state's water quality standards.

In adopting the ACT Compact, the signatory states made the following commitments:

The States of Alabama and Georgia mutually agreed to the principle of individual State efforts to control manmade water pollution from sources located and operating within each State and to the continuing support of each State in active water pollution control programs.

The States of Alabama and Georgia agreed to cooperate, through their appropriate State agencies, in the investigation, abatement, and control of sources of alleged interstate pollution within the ACT River Basin whenever such sources are called to their attention by the ACT Commission.

The States of Alabama and Georgia agree to cooperate in maintaining the quality of the waters of the ACT River Basin.

The States of Alabama and Georgia agreed that no state may require another state to provide water for the purpose of water quality control as a substitute for or in lieu of adequate waste treatment.

In adopting this Allocation Formula, the signatory states continue to acknowledge their responsibilities for protecting the water quality, ecology, and biodiversity of the

ACT, as provided in the Clean Water Act, 33 U.S.C. §§ 1251 et seq., the Endangered Species Act, 16 U.S.C. §§ 1532 et seq., the National Environmental Policy Act, 42 U.S.C. " 4321 et seq., the Rivers and Harbors Act of 1899, 33 U.S.C. §§ 401 et seq., and other applicable federal laws.

It is also recognized, owing to such variable factors as location, size, character and flow and the many varied uses of the waters of the ACT, that no single standard for sewage and waste treatment and no single standard of quality of receiving waters is practical and that the degree of treatment of sewage and industrial wastes should take into account the classification of the receiving waters according to present and proposed highest use, such as for drinking water supply, industrial and agricultural uses, recreation, maintenance and propagation of fish and wildlife, navigation, and waste assimilation.

## Concept

It is recognized that pursuant to applicable state and federal laws, each of the signatory states to this Allocation Formula has established water use classifications and water quality standards for certain waters within the ACT Basin. The signatory states acknowledge that each state has a responsibility and right to establish water use classifications and water quality standards for the waters within their borders. The purpose of this section is to ensure that while recognizing and maintaining a state's sovereignty over water quality issues arising within a state, the ACT Allocation Formula does not cause or contribute to degradation of existing water quality or violations of any state's water quality standards.

## Content

The signatory states shall provide to the ACT Committee the water use classification of and water quality standards applicable to each interstate water in the ACT Basin as adopted by appropriate water pollution control agency of each state. In the event a state's water pollution control agency proposes to change, modify or amend the water use classification of any interstate water in the ACT Basin, the respective state, directly or through said water pollution control agency, shall provide notice of such proposed change, modification or amendment in accordance with applicable state law to the ACT Committee. The signatory states agree that water crossing a state line shall meet the water quality standards and water use classifications in the receiving state.

A state water pollution control agency of any signatory state or the United States Environmental Protection Agency may certify to the ACT Committee an alleged violation of applicable water quality standards for waters entering said state. Upon such certification, the ACT Committee shall perform an investigation and if the ACT Committee finds that a violation of applicable water quality standards has occurred, is occurring or is likely to recur, it shall inform the ACT Commission of such violation along with any recommendations of the ACT Committee as to the manner of abatement of the source or sources of the violation.

After receiving information regarding an alleged violation of applicable water quality standards from the ACT Committee, the Commission shall inform the state within which the violation has occurred, is occurring or is likely to recur and may request that said state take such action as may be necessary or appropriate to redress such violation. The state within which the violation has occurred, is occurring or is likely to recur shall take action, as it deems appropriate, pursuant to applicable state and federal law to redress such violation and shall report its actions to the ACT Commission. Nothing in this agreement shall impair or impede a state or any citizen of a state from pursuing independent action against a source or sources of interstate water pollution in accordance with applicable law.

The states of Alabama and Georgia mutually agreed to the principle of individual State efforts to control man-made water pollution from sources located and operating within each State and to the continuing support of each State in active water pollution control programs.

In the event a water pollution control agency of any signatory state proposes to issue an NPDES permit for the discharge of wastewater in the ACT Basin where the use of such water occurred in another river basin, the signatory states agree that the applicable water pollution control agency shall mandate tertiary treatment of any such wastewater in the terms and conditions of the NPDES permit.

Section  
**9**

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ACT Water Allocation Formula

## Section 9 - Water Supply Contracts

### Purpose

The purpose of this section is to recognize that certain water supply Contracts between the U.S. Army Corps of Engineers and various entities may impact the ACT Allocation Formula and to encourage the U.S. Army Corps of Engineers to modify such contracts to diminish any potential interference with the ACT Allocation Formula.

### Background

Legislation authorizing the construction and operation of Federal reservoirs specified those project purposes for which the reservoir will be operated. In the Flood Control Act of 1944, Congress authorized the Secretary of the Army to enter into contracts for domestic and industrial uses of “surplus” water that may be available at any reservoir under the control of the Department of the Army. 33 U.S.C. § 708. Under the Corps’ regulations (ER 1105-2-100), “surplus water” is defined as either (a) water stored in a federal reservoir which is not required because the authorized need for the water never developed or the need is reduced by changes which have occurred since authorization or construction, or (b) “water which would be more beneficially used as municipal and industrial water than for the authorized purpose and which, when withdrawn, would not significantly affect authorized purposes over some specified time period.” ER 1105-2-100, p. 4-50. These regulations further indicate that permanent reallocations of water supply should not be made under the Secretary’s authority under the Flood Control Act. Id.

The Water Supply Act of 1958, 43 U.S.C. § 390b, recognized that it was “the primary responsibilities of the States and local interests [to develop] water supplies for domestic, municipal, industrial, and other purposes,” but “that the Federal Government should participate and cooperate with States and local interests in developing such water supplies in connection with the construction, maintenance, and operation of Federal navigation, flood control, irrigation, or multiple purpose projects.” 43 U.S.C. § 390b(a). To accomplish this objective, Congress announced that “storage may be included in any reservoir project surveyed, planned, constructed or to be planned, surveyed and/or constructed by the Corps of Engineers . . . to impound water for present or anticipated future demand or need for municipal or industrial water, and the reasonable value thereof may be taken into account in estimating the economic value of the entire project.” Id. § 390b(b). However, before

water supply could be added as a project purpose, the State or local interest requesting the water had to agree to pay for the cost of such storage. Id. By requiring local interests to pay for water supply developments at Federal projects, Congress has shown that local water supply does not provide a National Economic Development Benefit, only a local benefit. The Water Supply Act also provides that if the Corps' proposal to add water supply as a project purpose or water supply storage seriously affects the purposes for which the project was authorized, Congressional approval is required. Id. § 390b(d).

Once a State or local interest has paid for water supply storage at a federally owned reservoir, the rights of the State or local interests continue for "so long as the space designated for that purpose may be physically available, taking into account such equitable reallocation of reservoir storage capacities among the purposes served by the project as may be necessary due to sedimentation, and not limited to the term of years which may be prescribed in any lease agreement or other agreement with the Government, but the enjoyment of such right will remain subject to performance of its obligations prescribed in such lease agreement or agreement executed in reference thereto." Id. § 390e. Regulations mandate that "[p]ossible encroachment of the operation of water supply storage on the lawful water uses in the downstream areas will be carefully considered and fully coordinated with the responsible local interests as well as with the state agency responsible for the administration of water rights and water laws." ER 1105-2-100.

## Concept

It is recognized that at the present time, the U.S. Army Corps of Engineers has entered into water supply contracts with a number of entities permitting the use of storage at Federal reservoirs for water supply purposes pursuant to the provisions of the Water Supply Act of 1958. Under certain circumstances, conflicts may arise between the ACT allocation formula and the terms of these water supply contracts. This section of the ACT Allocation Formula is designed to minimize the potential for conflicts between the ACT Allocation Formula and to request that the U.S. Army Corps of Engineers seek to modify the terms of water supply contracts to eliminate the potential for conflicts.

## Content

The Corps is requested to provide to the ACT Committee true and complete copies of each water supply contract allocating storage or permitting the withdrawal of water from ordinary streams of any federally owned reservoir in the ACT Basin. Prior to entering into any new water supply contract or modifying an existing contract, the U.S. Army Corps of Engineers is requested to provide the ACT Committee an opportunity to review and comment upon each such proposal.

The signatory states request that the U.S. Army Corps of Engineers modify each existing water supply contract and to include in any new water supply contract the following (or a substantially similar) provision:

The U.S. Army Corps of Engineers and \_\_\_\_\_ (Entity Name) hereby acknowledge the terms and conditions of the ACT Allocation Formula and hereby agree to perform their obligations and responsibilities under this agreement in a manner consistent with said allocation formula. In the event the terms and conditions of this contract conflict with the terms of the ACT Allocation Formula, the parties agree that the ACT Allocation Formula shall govern. The parties further agree to provide such information to the ACT Committee as may be requested.

In the event a conflict arises between the ACT Allocation Formula and the terms and conditions of a water supply contract, the ACT Committee shall use its best efforts to negotiate a resolution of said conflict with the parties to the contract.

Section  
**10**

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ACT Water Allocation Formula

## Section 10 - Compensation

### Purpose

The purpose of this section is to define the obligation of beneficiaries of reservoir operational changes or water storage reallocation to compensate adversely affected stakeholders for loss of economic value due to such reservoir operational changes or water storage reallocation.

### Background and Concept

Reallocation of water storage or reservoir operational changes from an original Congressionally authorized purpose in favor of another purpose can result in economic losses to certain stakeholders. These economic losses occur regardless of whether Congress must approve the reallocation. To the extent that such economic losses can be reliably calculated, as described below, the beneficiary of a change in reservoir operations or a reallocation of water storage will compensate affected stakeholders for such losses. While full compensation for all downstream impacts is not possible due to the practical difficulties of measuring such impacts, compensating those stakeholders whose losses result directly from actions taken within the context of the ACT Water Allocation Formula which can be reliably calculated is appropriate for two reasons. First, such compensation is required by principles of fundamental fairness. Second, requiring the beneficiaries of water reallocation to bear the cost of reliably measurable adverse impacts to other stakeholders will ensure that an economically efficient, value-based hierarchy of water uses emerges within the basin.

### Implementation

The beneficiary of a change in reservoir operations or a water reallocation shall, prior to such change or reallocation, pay each adversely affected party the relevant Compensation Amount. Compensation Amounts due an agency of the Federal government shall be paid to the Federal government in accordance with applicable Federal law and regulations. The entire compensation amount due any non-federal adversely affected part shall be due and payable within 30 days after the first payment is due to the Federal government or Federal agency.



## Beneficiary of a Change in Reservoir Operations or Storage Reallocation

For purposes of this section, beneficiaries of a change in reservoir operations or a water reallocation shall include only those parties who are required under existing Federal law or regulations to make payments to the Federal government or an agency thereof with respect to the relevant change in reservoir operations or water reallocation.

## Compensation Amounts

In order to ensure reliability and confidence in the economic valuation of adverse impacts resulting from water reallocation or operational changes, only (i) adverse impacts to the Federal government which would otherwise be measured according to existing Federal procedures and (ii) adverse impacts to non-federal entities which are subject to measurement in accordance with those same existing Federal procedures (as modified to address non-federal interests), shall serve as a basis for calculating the Compensation Amounts. A separate Compensation Amount shall be calculated for each entity subject to an adverse impact described in (i) or (ii) above. This calculation shall include hydropower losses incurred by both Federal and federally-licensed projects and shall be performed by the U.S. Army Corps of Engineers. Hydropower losses for Federal and federally-licensed projects will be measured in accordance with the method supplied by the U.S. Army Corps of Engineers Engineer Regulation 1105-2-100 (December 28, 1990).

## Adversely Affected Parties.

For purposes of this section, adversely affected parties include only those parties for whom a Compensation Amount is calculated as described above.

Section  
**11**

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ACT Water Allocation Formula

## **Section 11 - Monitoring and Reporting**

### **Purpose**

This section sets forth the monitoring and reporting procedures to be used to verify compliance with the ACT Water Allocation Formula and requires the development of a plan for long term monitoring and reporting to support basin management decisions. The structure of the monitoring and reporting system and the related databases serving as repositories for the monitoring and reporting data are described.

### **Background and Concept**

Prior to passage of the ACT Compact, the States of Alabama and Georgia agreed that the existing monitoring network was inadequate. The purpose of monitoring stations and reporting procedures established by the ACT Water Allocation Formula is to overcome deficiencies in the existing monitoring network. A goal for the expanded monitoring network and reporting system is to provide data for improved management of the ACT Basin. An ancillary, important purpose, is to provide management information on system performance indicators related to the Water Schedule in this agreement.

“Monitoring” includes activities related to gathering, storing for retrieval, and reporting of meteorology, streamflow, water quality, reservoir release and elevation data. This data provides both instantaneous and time series information on the status and trends of hydrologic conditions in the ACT Basin. Monitoring of hydrologic conditions in the ACT Basin is provided by meteorology, flow, water quality, reservoir release and elevation measurements taken by various public and private agencies using generally accepted standards and methods.

“Reporting” are the activities related to gathering, storing for retrieval, and reporting of withdrawal, discharge, consumption and in-stream water uses within the ACT Basin. Reporting of withdrawal, discharge, consumption and water use data is provided by the entities using the water and the respective states and Federal agencies. Reporting also includes periodic survey, reference and technical material related to the ACT Basin.

Monitoring and reporting data are compiled in a series of interconnected databases using electronic collection, access and dissemination techniques.

Monitoring and reporting activities are integrally related to the interstate basin areas to verify compliance with the ACT Water Allocation Formula or more specifically, the water schedule. Section 7, Water Schedule, briefly discusses the existing gages and needs for new gage sites.

The implementation of the monitoring and reporting system and related databases will require additional study, interagency cooperation and both time and funding to revise and establish the monitoring network for improving basin management and verifying compliance with this agreement and will be accomplished under the supervision of the ACT Committee and in accordance with the implementation schedule.

## Monitoring Data

### Monitoring Database

The monitoring database includes data that describes the hydrologic conditions of the ACT Basin. This includes, but is not necessarily limited to, meteorology, flow, water quality and reservoir data. It is expected that this data will be maintained as a distributed database on electronic web sites. Each web site would contain a pointer, or link, to other web sites containing ACT Basin monitoring data. Each web site would also contain a pointer, or link, to the reporting database(s).

### Meteorology Data and Gage Network

Meteorology data shall be provided by a qualified agency, such as the U.S. Weather Service or its successor, to the ACT Committee and the public through an appropriate medium, such as a web site. A sample format for this type of data will be provided by the ACT Committee within 90 days of the implementation of the Allocation Formula.

The critical gages to be maintained or installed to provide meteorology data throughout the ACT Basin shall be identified during the implementation period under the supervision of the ACT Committee.

### Flow Data

Flow data shall be provided by a qualified agency, such as the U.S. Geological Service or its successor, to the ACT Committee and the public through an appropriate medium, such as a web site. A sample format for this type of data will be provided by the ACT Committee within 90 days of the implementation of the Allocation Formula.

The flow gages to be maintained or installed during the implementation period for purposes of monitoring water allocation are identified in Table 5 below. Critical gages to be maintained or installed to provide flow data throughout the ACT Basin shall be identified during the implementation period under the supervision of the ACT Committee.

At gage stations maintained or installed to monitor the Water Schedule in this agreement, the flow data shall be monitored continuously. Readings will be relayed to the responsible agency by telemetry (or best available technology) at intervals not to exceed every 60 minutes. The data shall be posted as provisional until such time as necessary adjustments are made.

### Water Quality Data

Water quality data shall be provided by qualified agencies, such as the EPA, the USGS, their successors, or state water quality agencies, to the ACT Committee and the public through an appropriate medium, such as web sites. A sample format of this type of data will be provided by the ACT Committee within 90 days of the implementation of the Allocation Formula.

The water quality gages to be maintained or installed during the implementation period for purposes of monitoring the Water Schedule and other sections of this agreement are identified below in Table 5. The critical gages to be maintained or installed to provide water quality data throughout the ACT Basin shall be identified during the implementation period under the supervision of the ACT Committee.

At gage stations maintained or installed to monitor water quality, the following water quality parameters shall be monitored continuously: 1) temperature; 2) conductivity; 3) algae A and 4) dissolved oxygen (DO) (measured at a depth of 5 feet). Readings will be relayed to the responsible agency by telemetry (or best available technology) at intervals not to exceed every 60 minutes. The data will be posted as provisional until adjustments, if any are required, are completed.

As a part of the regular water quality monitoring program, nitrogen (measured with NO<sub>2</sub> and NO<sub>3</sub> analyzed together) and phosphorous will be monitored weekly. When streamflows decrease to or below the "low flow trigger points" (20% of average monthly flow) these parameters will be monitored every third day. The low flow trigger points are determined at the same locations as are used for drought monitoring. The increased water quality monitoring for low flow periods will occur at all gage locations identified in Table 5.

### Flow and Water Quality Gage Network

A network of gages providing flow and/or water quality information shall be maintained or provided to monitor compliance with this agreement. These gages shall be maintained, relocated or located as identified in Table 5 under the supervision of the ACT Committee.

Table 5  
Gage Network

Stream Name	Existing Monitoring	Proposed Monitoring
Little River	Gage # 02399200 – Little River near Blue Pond, AL Lat: 34°-17'-20" Long: 85°-40'-50"	No new gaging required
Chattooga River	Gage # 02399200 – Little River near Blue Pond, AL	New gage near state boundary on the Chattooga

	Lat: 34°-17'-20" Long: 85°-40'-50"	and the North Chattooga River branches
Big Cedar Creek		No new gaging required
Coosa River Basin Coosa River	<p>Gage # 02397000 – Coosa River near Rome, GA Lat: 34°-12'-01" Long: 85°-15'-24"</p> <p>Gage # 02397530 – Coosa River near Coosa, GA Lat: 34°-11'-54" Long: 85°-26'-46"</p> <p>Gage # 02399500 – Coosa River at Leesburg, GA Lat: 34°-10'-36" Long: 85°-45'-15"</p> <p>Gage # 02400500 – Coosa River at Gadsen, AL Lat: 34°-00'-37" Long: 85°-59'-52"</p> <p>Gage # 02407000 – Coosa River at Childersburg, AL Lat: 33°-17'-30" Long: 86°-21'-50"</p> <p>Gage # 02411000 – Coosa River at Jordan Dam, near Wetumpka, AL Lat: 32°-36'-50" Long: 86°-15'-18"</p> <p>Gage # 02411600 – Coosa River at Wetumpka, AL Lat: 32°-32'-13" Long: 86°-12'-32"</p>	No new gaging required
Coosa River Basin Coosawattee River	<p>Gage # 02380500 – Coosawattee River near Ellijay, GA Lat: 33°-03'-54" Long: 85°-36'-51"</p> <p>Gage # 02382500 – Coosawattee River at Carters, GA Lat: 34°-36'-13" Long: 84°-41'-44"</p> <p>Gage # 02383500 – Coosawattee River near Pine Chapel, GA Lat: 34°-33'-54" Long: 85°-36'-51"</p> <p>Gage # 02383540 – Coosawattee River near Calhoun, GA Lat: 34°-32'-28" Long: 84°-54'-03"</p> <p>Gage # 02387500 – Oostanaula</p>	No new gaging required

	<p>River at Resaca, GA Lat: 34°-34'-29" Long: 84°-56'-29"</p> <p>Gage # 02388520 – Oostanaula River at Rome, GA Lat: 34°-16'-13" Long: 85°-10'-24"</p> <p>Gage # 02388530 – Oostanaula River at 5<sup>th</sup> Avenue at Rome, GA Lat: 34°-15'-24" Long: 85°-10'-18"</p>	
Coosa River Basin Etowah River	<p>Gage # 02392000 – Etowah River at Canton, GA Lat: 34°-14'-23" Long: 84°-29'-47"</p> <p>Gage # 02394000 – Etowah River at Allatoona Dam, Above Cartersville, GA Lat: 34°-09'-47" Long: 84°-44'-28"</p> <p>Gage # 02394670 – Etowah River near Cartersville, GA Lat: 34°-08'-34" Long: 84°-50'-20"</p> <p>Gage # 02394969 – Etowah River at Euharlee, GA Lat: 34°-08'-52" Long: 84°-55'-15"</p> <p>Gage # 02394980 – Etowah River near Euharlee, GA Lat: 34°-08'-52" Long: 84°-55'-15"</p> <p>Gage # 02395000 – Etowah River near Kingston, GA Lat: 34°-12'-24" Long: 84°-58'-44"</p>	No new gaging required
Terrapin Creek Tributaries	<p>Gage # 02400100 – Terrapin Creek at Ellisville, AL Lat: 33°-03'-54" Long: 85°-36'-51"</p>	No new gaging required
Tallapoosa River	<p>Gage # 02414715 – Tallapoosa River near New Site, AL Lat: 32°-58'-38" Long: 85°-44'-23"</p> <p>Gage # 02414500 – Tallapoosa River at Wadley, AL Lat: 33°-07'-00" Long: 85°-33'-39"</p> <p>Gage # 02412000 – Tallapoosa River</p>	A new gage will be installed near state boundary at a location to be determined by the ACT Committee

	<p>near Heflin, AL Lat: 33°-37'-22" Long: 85°-30'-48"</p> <p>Gage # 02418500 –Tallapoosa River below Tallassee, AL Lat: 32°-33'-15" Long: 85°-53'-21"</p> <p>Gage # 02419890 –Tallapoosa River near Montgomery, AL Lat: 32°-26'-23" Long: 86°-11'-44"</p>	
Little Tallapoosa	<p>Gage # 02413300 – Little Tallapoosa River near Newell, AL Lat: 33°-26'-14" Long: 85°-23'-57"</p>	A new gage will be installed near state boundary at a location to be determined by the ACT Committee
Little Tallapoosa Tributary Drainage Area		No new gaging required

## Reservoir Data

Reservoir elevation and release data shall be provided by reservoir operators (such as the U.S. Army Corps of Engineers and the Alabama Power Company or their successors) to the ACT Committee and the public through an appropriate medium, such as web sites. A sample format of this type of data will be provided by the ACT Committee within 90 days of the implementation of the Allocation Formula.

## Reporting Data

### Reporting Database

The reporting database includes data regarding withdrawals and returns, calculated consumption data for appropriate geographic areas such as river reaches and basins, biota data from surveys and periodic studies, and other natural resource information that enhances knowledge of the ACT Basin. It is anticipated that this data will be maintained in centralized, but mutually accessible databases by the states. These databases would be maintained in electronic format with the ability to interact with the monitoring database.

### Withdrawal and Discharge

Each state will be responsible for providing the ACT Committee with information summarizing all agriculture, municipal, industrial and thermal water withdrawals and discharges. The data will be developed on a daily average by month and reported on a quarterly basis or as otherwise specified by the ACT Committee. Water users could periodically report withdrawal and discharge information by electronically posting their data to a location designated by their respective state. The reporting frequency could vary based on the volume of water withdrawn, as established by the ACT Committee.

## **Consumption**

Consumption reports would be calculated within the reporting database by using the reported withdrawal and discharge data. Consumption data would be reported by the appropriate state for geographic areas as needed to determine compliance with this agreement, trends within sub-basins or river reaches, or to provide other information as needed.

## **Biota**

Periodic study and survey biota data will be included, as approved by the ACT Committee, in the reporting database to provide information on species and habitats within the ACT Basin and to begin to establishing long term trend information on the natural resources of the system.

## **Other**

Other reporting or basin management information may be added to the reporting database in the future upon approval of the ACT Committee.



Section  
**12**

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ACT Water Allocation Formula

## Section 12 - Implementation Schedule

### Purpose

The purpose of this section is to describe the supplemental work necessary to implement the ACT Water Allocation Formula and to identify a schedule for completion of the work. The work summarized in this section was initially described in prior sections.

### Background and Concept

It is realized that some portions of the ACT Water Allocation Formula will take additional time to prepare or implement. This "Implementation Schedule" reflects that realization by scheduling the remaining work and activities. It is the intent that the work and activities be finished as scheduled. The ACT Commission commits to seeking the necessary funding to implement the tasks identified in this section as scheduled.

### Implementation Schedule

The Implementation Schedule consists of the following actions or as otherwise identified elsewhere in this ACT Water Allocation Formula.

Section	Actions Required	Schedule
Preamble	No action required	None
1. Implementing Agreement	No action required	None
2. Definitions	No action required	None
3. Conversion Factors	No action required	None
4. ACT Committee	No action required.	None
5. Flood	No action required	None
6. Drought	Prepare drought plan	Two years after approval of Formula
7. Water Schedule	See Monitoring and Reporting for gages related to water schedule	None
8. Water Quality	No action required	None
9. Water Supply Contracts	No action required	None
10. Compensation	No action required	None
11. Monitoring and Reporting	Establish gaging network	

	For allocation formula For long term monitoring	Nine months after approval of Formula Two years after approval of Formula
12. Implementation Schedule	No action required	None
13. Enforcement	No action required	None
14. Approval	No action required	None

Section  
**13**

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ACT Water Allocation Formula

## Section 13 - Enforcement

### Purpose

The purpose of this section is to describe the ACT Water Allocation Formula enforcement procedures.

### Background and Concept

It is intended that the ACT Water Allocation Formula be enforced through the provisions of the ACT Compact. The ACT Compact includes:

Article XIII – “Dispute Resolution,”  
Article XIV – “Enforcement,” and  
Article XVII – “Agreement Regarding Water Quality”.

### Enforcement Procedures

The provisions of Article XIII(a) of the Alabama-Coosa-Tallapoosa River Basin Compact (Alabama Code, Title 33-18-1 et seq., Ga. Code Ann. Section 12-10-110 et seq.; and Public Law No. 105-105, 111 Stat. 2223) shall govern disputes between the voting members (states) of the Compact regarding compliance with the ACT Water Allocation Formula.

The provisions of Article XIII(b) of the Alabama-Coosa-Tallapoosa River Basin Compact (Alabama Code, Title 33-18-1 et seq., Ga. Code Ann. Section 12-10-110 et seq.; and Public Law No. 105-105, 111 Stat. 2223) shall govern disputes between any of the voting members of the Compact and the United States relating to noncompliance with the ACT Water Allocation Formula as a result of any action or any refusal to act by officers, agencies or instrumentalities of the United States; provided, however, that no mediator shall be selected under Article XIII(b) without the concurrence of the Federal Commissioner.

Section  
**14**

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ACT Water Allocation Formula

## Section 14 - Approval

IN WITNESS WHEREOF the undersigned, being duly authorized by Article VI(g)(12) of the Alabama - Coosa - Tallapoosa River Basin Compact, have signed this agreement.

Done at Montgomery, Alabama this\_\_\_\_ day of \_\_\_\_\_, 1998

State of Alabama

State of Georgia

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Fob James, Jr., Governor

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Zell Miller, Governor

Witnessed this \_\_\_\_ day of \_\_\_\_\_ 1998:

State of Alabama  
Alternate State Commissioner

State of Georgia  
Alternate State Commissioner

\_\_\_\_\_  
Honorable Richard J. Laird

\_\_\_\_\_  
Mr. G. Robert Kerr

State of Alabama  
Alternate State Commissioner

State of Georgia  
Alternate State Commissioner

\_\_\_\_\_  
Dr. Walter B. Stevenson Jr.

\_\_\_\_\_  
Mr. Harold F. Reheis

State of Alabama  
Alternate State Commissioner

\_\_\_\_\_  
Dr. Donald C. Hines

State of Alabama  
Alternate State Commissioner

\_\_\_\_\_  
Mr. Edwin I. Gardner